



Advanced Master's Degree Digital Art for Video Games

» Modality: online» Duration: 2 years

» Certificate: TECH Global University

» Credits: 120 ECTS

» Schedule: at your own pace

» Exams: online

We bsite: www.techtitute.com/us/videogames/advanced-master-degree/advanced-master-degree-digital-art-video-games

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The digital entertainment industry has experienced exponential growth in recent years, especially in the creation of video games. This phenomenon has generated a great demand for professionals specialized in digital art for video games, able to design characters, environments, objects and scenarios that meet the demands of the industry and provide an unforgettable gaming experience to the user.

In this context, TECH has developed this Advanced Master's Degree in Digital Art for Video Games, with the aim of comprehensively training professionals for this constantly evolving industry. Students enrolled in this program will have the opportunity to acquire a wide range of skills and knowledge in the field of digital art, and will be trained to work in high-level video game development studios.

During the program, students will delve into key areas such as professional drawing, volume, aesthetics, color, character and scenario design, and anatomy. They will also study industry programs and tools, such as Photoshop, Clip Studio Paint and Procreate, mastering all their intricacies. They will also have the opportunity to develop teamwork skills, project analysis and visual narrative, with the aim of being prepared to make a significant leap in the labor market.

A relevant aspect of the program is its 100% online format, which allows students to access content from anywhere and at any time. This will provide them with greater flexibility and freedom to adjust the teaching to their schedules and personal needs, without having to sacrifice any of their own responsibilities.

This **Advanced Master's Degree in Digital Art for Video Games** contains the most complete and up-to-date program on the market. The most important features include:

- The development of case studies presented by experts in artistic design for video games
- 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
- Special emphasis on innovative methodologies in Creation and Models for Video Games
- 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



Boost your creativity and develop your own artistic style, giving a noticeable boost to your portfolio, with this TECH Advanced Master's Degree"



Explore the creative potential of the most striking virtual worlds, analyzing art in 2D, 3D and Virtual Reality"

It includes in its teaching staff professionals belonging to the field of video games, who pour into this program the experience of their work, in addition to recognized specialists of reference 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 an immersive learning experience designed to prepare for real-life situations.

This program is designed around Problem-Based Learning, whereby the student must try to solve the different professional practice situations that arise throughout the program. For this purpose, the professional will be assisted by an innovative interactive video system created by renowned and experienced experts.

Master professional drawing techniques, volume, aesthetics, color and anatomy for video game design with this Advanced Master's Degree.

Enroll now and discover the fundamentals of clothing and scenery design, integrating the different roles of the artist in a transversal work group.





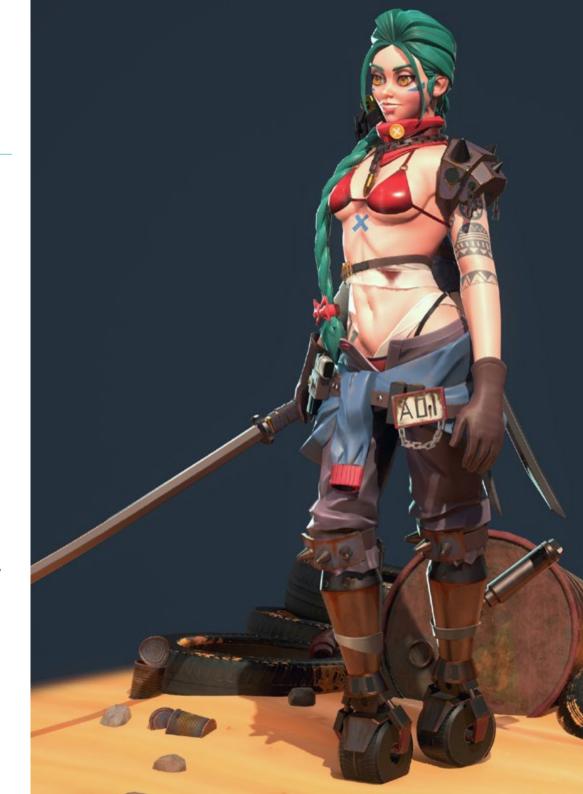


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General Objectives

- Develop professional quality works
- Create a specialized portfolio for the video game industry.
- Expand your knowledge of drawing
- Understand the functioning of the artistic industry in video games.
- Enhancing teamwork skills
- Analyze different positions in the industry
- Expand your knowledge of design
- Promote the presentation of works in a professional manner.
- Study technical artistic knowledge in depth
- Focus your career on getting your dream job
- Understand the advantages and constraints provided by Virtual Reality
- Develop high-quality hard surface modeling
- Create high-quality organic modeling
- Understand the principles of retopology
- Understand the principles of UVS
- Master Baking in Substance Painter
- Expertly manage layers
- Be able to create a dossier and submit works at a professional level, at the highest quality
- Make a conscious decision as to which programs best fit your Pipeline





Module 1. Professional Drawing

- Know the main materials with which an artist works.
- Learn how to make digital versus traditional sketches
- Study the simplification of complex geometric shapes
- Improve Line Drawing

Module 2. Volume

- Study the differences between 2D and 3D i+n depth
- Develop knowledge in shadows in planes and anatomy
- Know the different types of shading according to the chosen style
- Know how to apply volume according to perspective and color

Module 3. Esthetics

- Study the different styles and modern canons
- Study the stylization of the human being in depth
- Developing your own style
- Enhance the visual narrative of the works

Module 4. Color

- Know the behavior of light and its propagation
- Assess the different aspects of light, shades, saturation and contrast
- Study the different techniques to apply color
- Know the importance of color in Art for Video Games

Module 5. Programs in the Industry

- Study in depth the different programs currently used in the industry
- Know the differences between Photoshop, Clip Studio Paint and Procreate
- Master the Photoshop interface and tools
- Learn to digitize traditional media professionally

Module 6. 2D in the Video Game Industry

- Analyze the state of the digital entertainment industry today
- Study the different types of artists in demand in the industry in depth
- Study the integration of the different roles of the artist in a transversal work group
- Recognize the importance of the art director in a video game project

Module 7. Anatomy

- Study the Anatomy of Organic Forms
- Differentiate between the complex and simple skeleton
- Learn to avoid common mistakes when portraying a human face
- Know how to correctly apply color according to tones and shades on the human body

Module 8. Develop Drawing

- Develop your own drawing techniques
- Create professional and effective work routines
- Know the techniques to get out of the comfort zone
- Know the communities to actively participate in them and seek feedback

Module 9. Design in Video Games

- Devise artistic concepts for videogame design
- Learn how to professionally design characters and Props
- Know the basics of clothing and set design
- Analyze the work in order to know how to clean it and present it in an appropriate way

Module 10. Art Industry for Videogames: Musts

- Know the must-haves of the videogame industry
- Create a portfolio in different languages
- Have a presence on industry-relevant websites and social networks
- Know how to work remotely and the discipline required to maintain professionalism

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Module 11. The Project and the Unity Graphics Engine

- Develop a VR project
- Delve into Unity for VR
- Import textures and implement the necessary materials efficiently
- Create realistic and optimized lighting

Module 12. Blender

- Develop procedural materials
- Be able to animate a modeling
- Use fluid, hair, particle, and clothing simulations with ease
- Create high-quality renders in both Eevee and Cycles
- Learn how to operate the new grease pencil and how to get the best out of it
- Learn how to use the new geometry nodes and be able to do fully procedural modeling

Module 13. 3ds MAX

- Master modeling in 3DS MAX
- Learn the compatibility of 3DS Max with Unity for VR
- Learn the most used modifiers and be able to handle them with ease
- Use real workflow techniques

Module 14. Zbrush

- Be able to create any kind of meshes to start modeling
- Be able to create any type of mask
- Master IMM and Curve brushes
- Transform a low-poly model into high-poly one
- Create high-quality organic modeling

Module 15. Retopology

- Master ZBrush retopology
- Learn when to use ZRemesher, Decimation Master, and ZModeler
- Be able to do the retopology of any modeling
- Master the specialized professional tool Topogun
- Train the professional in the creation of complex retopos

Module 16. UVs

- Master the UV tools available in Zbrush
- Learn where to cut a modeling
- Get the best out of the UV space
- Master the UV specialized tool, Rizom

Module 17. Baking

- Understand the principles of Baking
- Learn how to solve the problems that may arise when baking a model
- To be able to bake any modeling
- Master real-time baking in Marmoset

Module 18. Substance Painter

- Use substance textures in a smart way
- Be able to create any type of mask
- Master generators and filters
- Do high-quality textures for a hard surface modeling
- Do quality textures for an organic modeling
- Be able to do a good Render to show the Props



Module 19. Marmoset

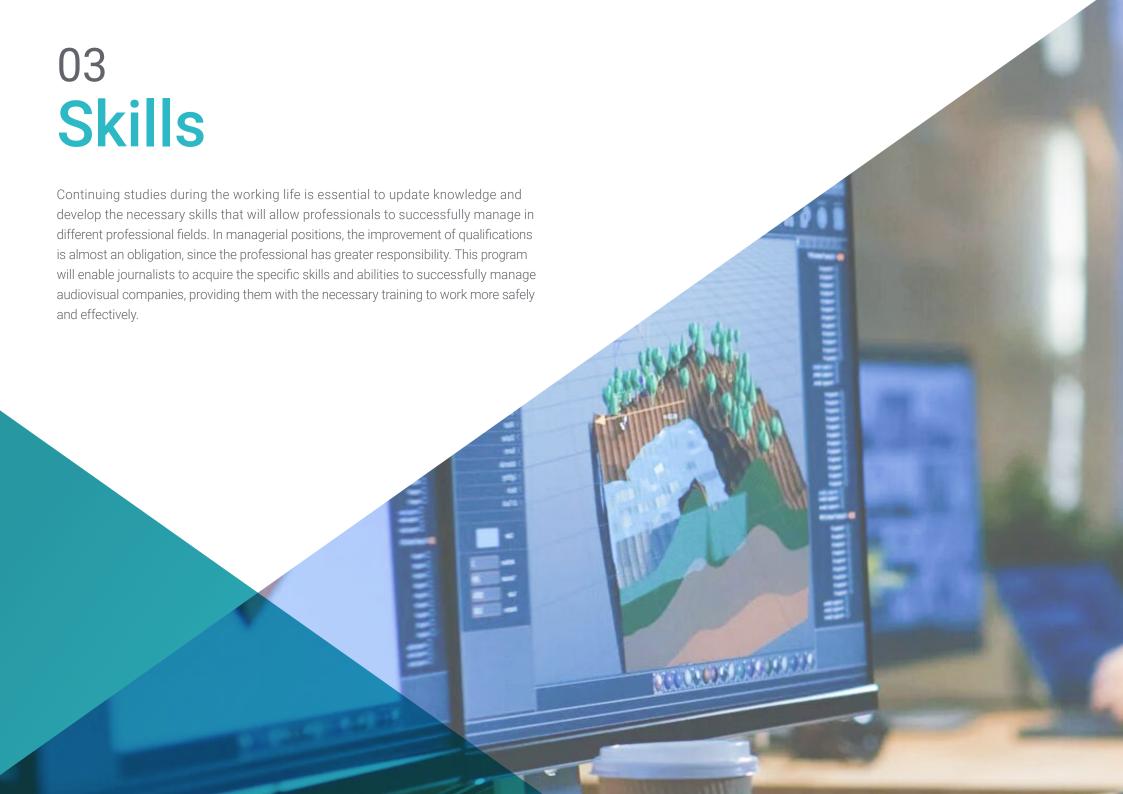
- Analyze this tool in depth and give the professional an idea of its advantages
- Be able to create any type of mask
- Master generators and filters
- Do high-quality textures for a hard surface modeling
- Do quality textures for an organic modeling
- Be able to do a good Render to show the Props

Module 20. Sci-Fi Environment

- Understand the knowledge acquired
- Understand the usefulness of all the tips applied to a real project
- Make a conscious decision as to which programs best fit your Pipeline
- Have a professional quality work in your dossier



Boost your presence on industry-relevant websites and social networks by knowing the keys to creating an eye-catching portfolio in different languages"



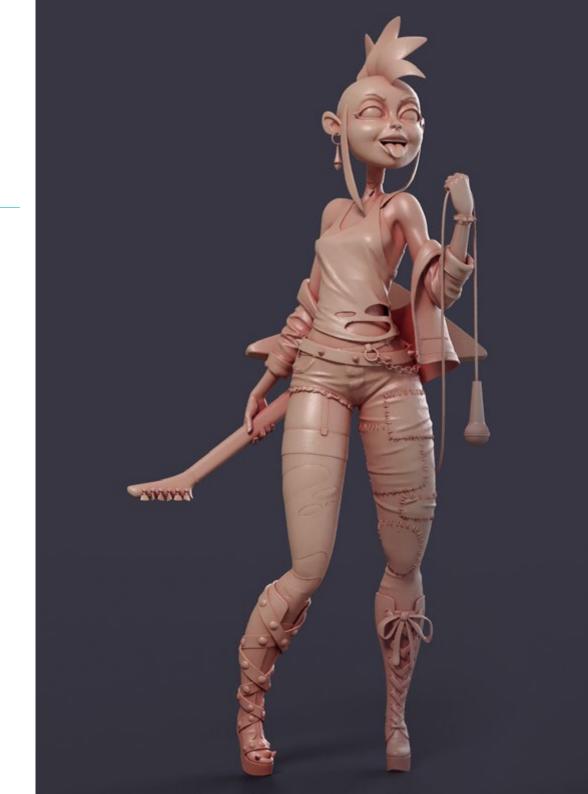


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General Skills

- Develop concepts and drawings for any type of project
- Master the most common tools used in the industry
- Adapting to all types of requests, styles and work environments
- Create an ironclad work discipline to stand out from the competition
- Study one's own artistic style in depth and, in turn, enhance it to the highest level
- Learn how to carry out a real project from start to finish
- Master the necessary tools for the creation of Virtual Reality projects
- Apply the acquired knowledge and problem solving skills to optimize the workflow as much as possible
- Integrate knowledge and obtain an in-depth vision of the different uses of Virtual Reality
- Know how to identify the limitations and differences with respect to other sectors of the 3D industry
- Understand and internalize the most used materials in Virtual Reality applied to the systems of the sector for their efficiency and competitiveness in the current market
- Be able to correctly organize the files of a professional project
- Promote the optimization of the existing resources in the different software for the creation of Virtual Reality





Specific Skills

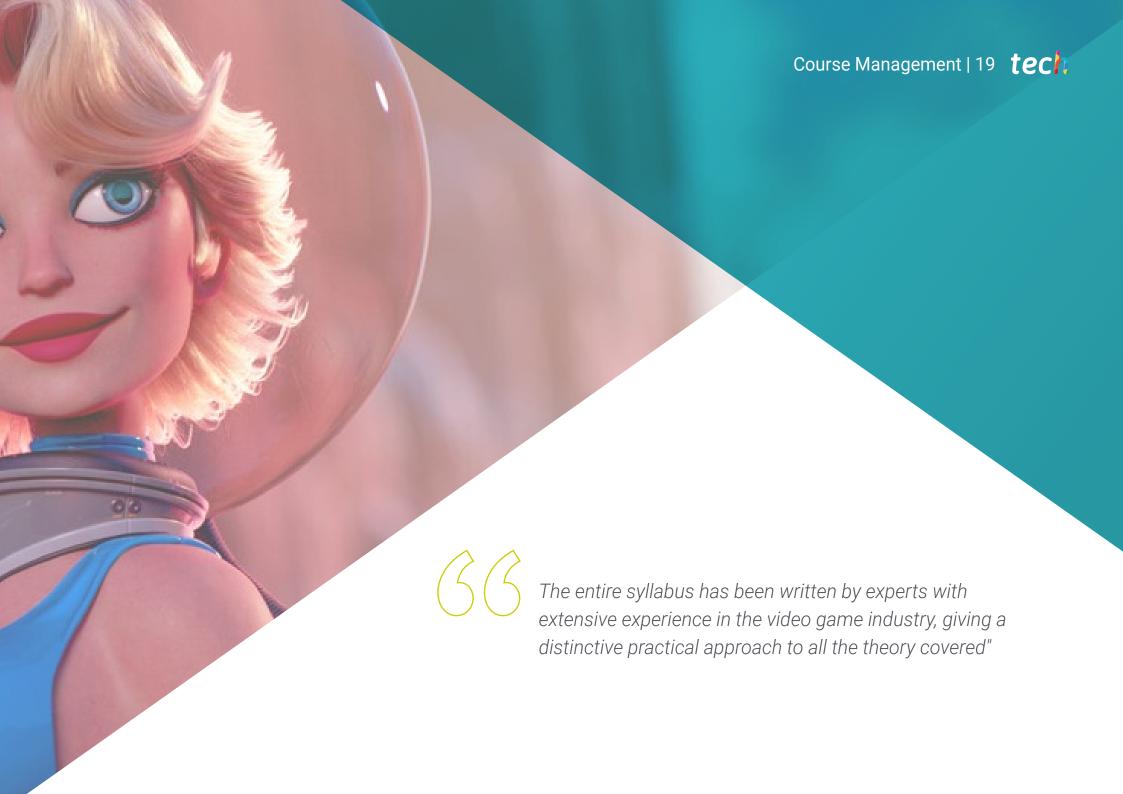
- Study pictorial methods in depth
- Develop a broad understanding of artistic routines
- Develop a broad understanding of the human archetype
- Develop complex shapes from memory
- Professional use of color
- Improve the way you present your work
- Simplify complex geometric shapes
- Adequately detail your work and request Briefings
- Correct use of references
- Generate a specialized artistic Development
- Learn, master, and optimize all the design tools and software used in Virtual Reality
- Delve into the concepts of rendering, modeling, texturing, and lighting in the creation of Virtual Reality
- Differentiate the necessary strategies to create a project from scratch with an orderly methodology, saving resources and time with a professional result
- Obtain an exhaustive knowledge of the alternatives to the most common problems faced by a designer in the execution of a Virtual Reality project

- Obtain a complete vision of all the aspects related to Virtual Reality, an essential phase to improve in a specialized professional field
- Understand the usefulness of the different tips shown and their real application in the creation of VR projects
- Consolidate the knowledge acquired during the learning process thanks to the practical application of the contents
- Master the design of the main stages in the creation of a Virtual Reality material
- Elaborate an effective control plan of the creation work and follow up on the project until its completion
- · Submit professional Virtual Reality projects



Perfect your character design, props and high quality scenery with this Advanced Master's Degree in Digital Art for Video Games from TECH"





Management



Mr. Mikel Alaez, Jon

- Conceptual artist for characters in English Coach Podcast
- Conceptual Artist in MasterD Render at the School of Video Games
- Graduate in Fine Arts at the University of the Basque Country/Euskal Herriko Unibertsitatea (UPV/EHU)
- Master's Degree in Concept Art and Digital Illustration



Mr. Menéndez Menéndez, Antonio Iván

- · Senior environment and element artist and 3D consultant at The Glimpse Group VR
- 3D model designer and texture artist at INMOREALITY
- · Props and environment artist for PS4 games at Rascal Revolt
- Graduated in Fine Arts at the UPV
- Specialist in Graphic Techniques from the University of the Basque Country
- Master's Degree in Sculpture and Digital Modeling by Voxel School University Center for Digital Arts
- Professional Master's Degree in Art and Design for Video Games by U-Tad University Center for Technology and Digital Art



Professors

Ms. Martínez Marín, Igone

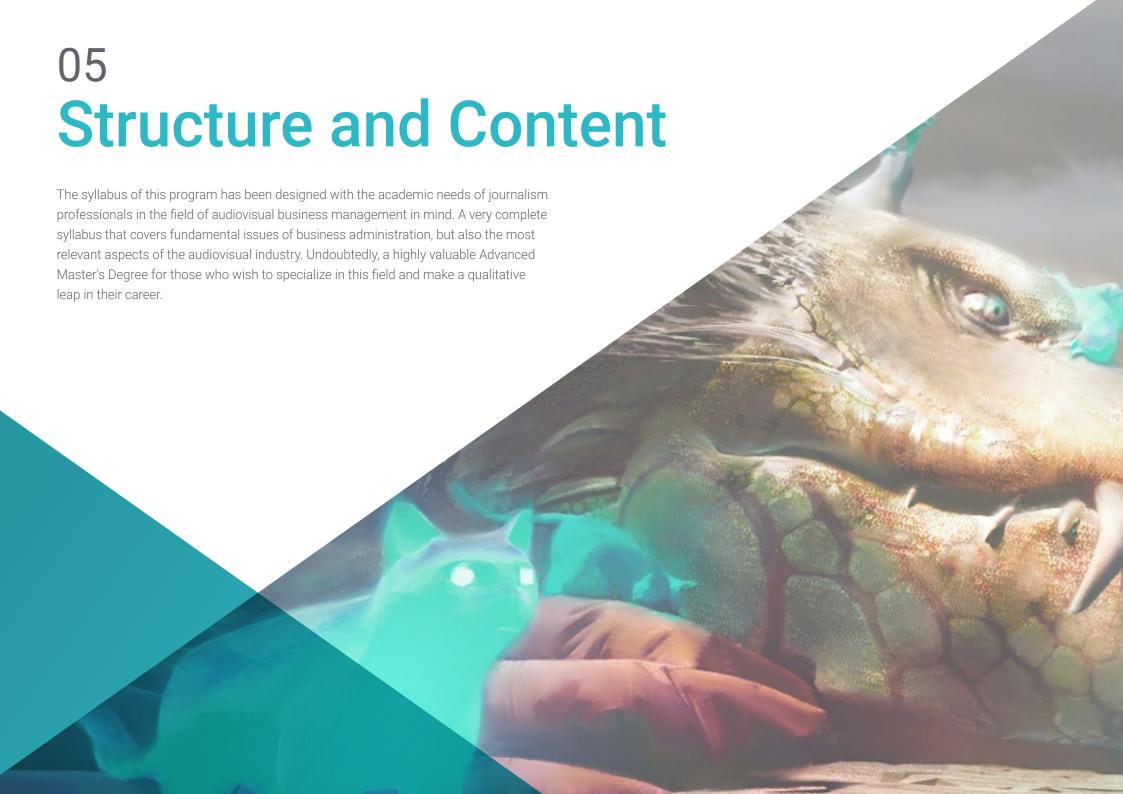
- Video Game Producer and Publicist at SOEDESCO
- Ambassador of Women in Games WIGJ.
- Senior Video Editor and Social Media at Chicas Gamers
- Advertising Director and Product Manager at Meridiem Games
- Digital Marketing Director at Atico34 Group
- Video Editor at Boomerang TV
- Degree in Telecommunications with Specialization in Image and Sound from the Polytechnic University of Madrid
- Higher Level Training Cycle in Audiovisual Media Production at the School of Communication, Image and Sound
- Diploma in Audiovisual Communication from Pearson College London

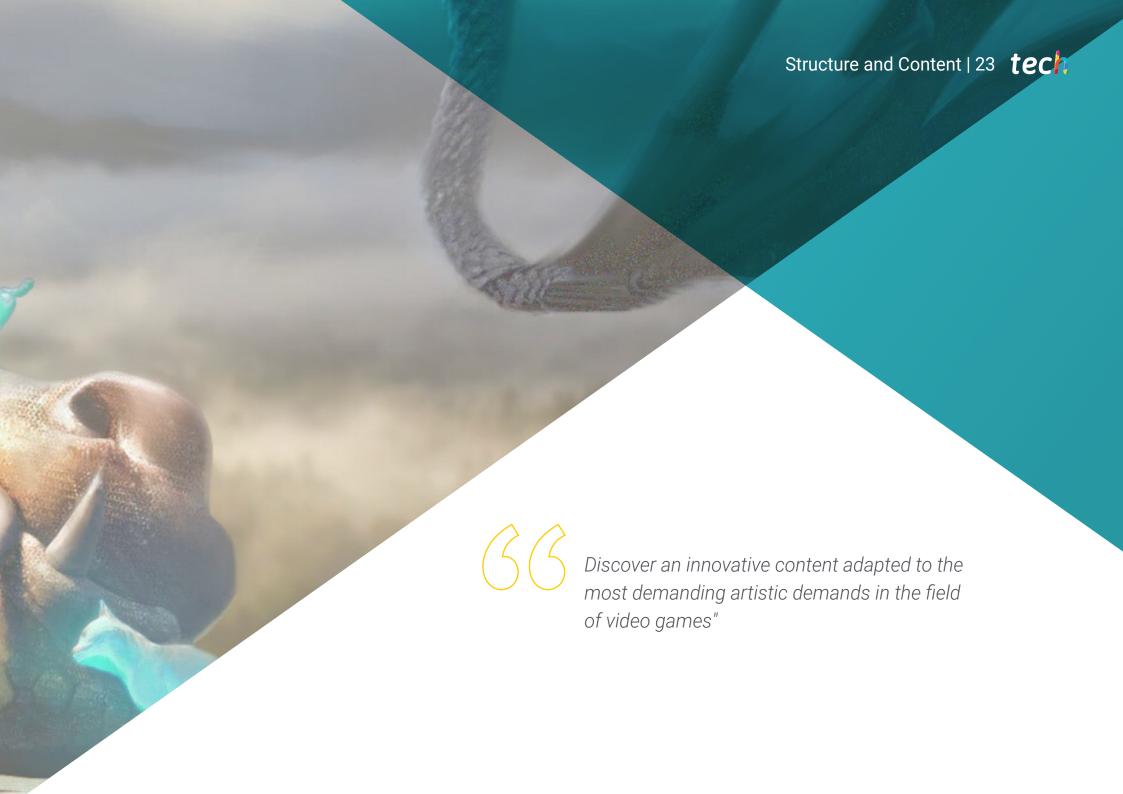
Mr. Márquez Maceiras, Mario

- Audiovisual Operator at PTM Pictures That Moves
- Gaming tech support agent at 5CA
- 3D and VR environment creator and designer at Inmoreality
- Art Designer at Seamantis Games
- Founder of Evolve Games
- Graduated in Graphic Design at the School of Art of Granada
- Graduated in Video Games and Interactive Content Design at the School of Art of Granada
- Professional Master's Degree in Game Design U-Tad University Center for Technology and Digital Art

Mr. Morro, Pablo

- 3D Artist specialized in modeling, VFX, and textures
- 3D Artist at Mind Trips
- Graduated in Video Game Creation and Design at Jaume I University





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Module 1. Professional Drawing

- 1.1. Materials
 - 1.1.1. Traditional
 - 1.1.2. Digital
 - 1.1.3. Environment
- 1.2. Ergonomics and Heating
 - 1.2.1. Warm-Ups
 - 1.2.2. Rest
 - 1.2.3. Health
- 1.3. Geometric Shapes
 - 1.3.1. Line
 - 1.3.2. Ellipses
 - 1.3.3. 3D Shapes
- 1.4. Perspectives
 - 1.4.1. A Vanishing Point
 - 1.4.2. Multiple Leakage Points
 - 1.4.3. Advice
- 1.5. Sketch
 - 1.5.1. Lace
 - 1.5.2. Digital vs. Traditional
 - 1.5.3. Clean
- 1.6. Line Art
 - 1.6.1. About Sketch
 - 1.6.2. Digital
 - 1.6.3. Advice
- 1.7. Shading in Drawing
 - 1.7.1. Plots
 - 1.7.2. Blurring
 - 1.7.3. Filling
- 1.8. Simplify Shapes
 - 1.8.1. Organic Shapes
 - 1.8.2. Structures
 - 1.8.3. Fusion of Simple Shapes

- 1.9. Means of lnk Filling
 - 1.9.1. Ink
 - 1.9.2. Ballpoint Pen
 - 1.9.3. Digital
- 1.10. Line Improvement
 - 1.10.1. Exercises
 - 1.10.2. Line Combing
 - 1.10.3. Practice

Module 2. Volume

- 2.1. 3D Shapes
 - 2.1.1. 2D to 3D
 - 2.1.2. Mixing Shapes
 - 2.1.3. Study
- 2.2. Shadows on Planes
 - 2.2.1. Lack of Light
 - 2.2.2. Light Direction
 - 2.2.3. Shadows on Different Objects
- 2.3. Ambient Occlusion
 - 2.3.1. Definition
 - 2.3.2. Light Difficulty
 - 2.3.3. Contact
- 2.4. Shadows in Anatomy
 - 2.4.1. Face
 - 2.4.2. Human Body Plans
 - 2.4.3. Lighting
- 2.5. Narrative Shading
 - 2.5.1. Example
 - 2.5.2. When to Use
 - 2.5.3. Exaggeration
- 2.6. Comic Shading
 - 2.6.1. Styles
 - 2.6.2. Plots
 - 2.6.3. Authors

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- 2.7. Sleeve Shading
 - 2.7.1. Styles
 - 2.7.2. Authors
 - 2.7.3. Implementation
- 2.8. Plots
 - 2.8.1. Traditional
 - 2.8.2. Digital
 - 2.8.3. Wefts Made
- 2.9. Volume and Perspective
 - 2.9.1. Without Shading
 - 2.9.2. Shapes
 - 2.9.3. Implementation
- 2.10. Volume by Color
 - 2.10.1. Depth
 - 2.10.2. Shape
 - 2.10.3. Brushstroke

Module 3. Esthetics

- 3.1. Styles
 - 3.1.1. Seniority
 - 3.1.2. Modern
 - 3.1.3. Video Games
- 3.2. Modern Styles and Canon
 - 3.2.1. 8 Heads
 - 3.2.2. Disney
 - 3.2.3. Video Games
- 3.3. American Style
 - 3.3.1. Comics
 - 3.3.2. Illustration
 - 3.3.3. Animation
- 3.4. Asian Style
 - 3.4.1. Manga
 - 3.4.2. Anime
 - 3.4.3. Traditional

- 3.5. European Style
 - 3.5.1. History
 - 3.5.2. Comic
 - 3.5.3. Illustration
- 3.6. Aesthetics by Gender
 - 3.6.1. Infantile/Juvenile
 - 3.6.2. Fantasy
 - 3.6.3. Other
- 3.7. Canons
 - 3.7.1. History
 - 3.7.2. Canons
 - 3.7.3. Flexibility
- 3.8. Styling
 - 3.8.1. The Human Being
 - 3.8.2. Adaptation
 - 3.8.3. Shapes
- 3.9. Visual Storytelling
 - 3.9.1. Meaning
 - 3.9.2. Intention
 - 3.9.3. Environment
- 3.10. Own Style
 - 3.10.1. Analysis
 - 3.10.2. Practice
 - 3.10.3. Advice

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Module 4. Color

- 4.1. Light Propagation
 - 4.1.1. Technicality
 - 4.1.2. Example
 - 4.1.3. Light Color
- 4.2. Light on Surfaces
 - 4.2.1. Reflexes
 - 4.2.2. Bounces
 - 4.2.3. Subsurface Scattering
- 4.3. Design and Color
 - 4.3.1. Exaggeration
 - 4.3.2. Imagination
 - 4.3.3. Use
- 4.4. Light in Shadows
 - 4.4.1. Reflexes
 - 4.4.2. Color in the Shadows
 - 4.4.3. Tricks
- 4.5. HUE/Matrix
 - 4.5.1. Definition
 - 4.5.2. Importance
 - 4.5.3. Use
- 4.6. Saturation
 - 4.6.1. Definition
 - 4.6.2. Importance
 - 4.6.3. Use
- 4.7 Value
 - 4.7.1. Definition
 - 4.7.2. Contrast in Art Work
 - 4.7.3. Use
- 4.8. Color in Illustration
 - 4.8.1. Differences
 - 4.8.2. Freedom
 - 4.8.3. Theory
- 4.9. Color in Concept Art
 - 4.9.1. Importance
 - 4.9.2. Design and Color
 - 4.9.3. Prop Scenario Character

- 4.10. Color in Art
 - 4.10.1. History
 - 4.10.2. Changes
 - 4.10.3. Reference:

Module 5. Programs in the Industry

- 5.1. Photoshop
 - 5.1.1. In the industry
 - 5.1.2. Basics
 - 5.1.3. Recommendations
- 5.2. Clip Studio Paint
 - 5.2.1. Differences
 - 5.2.2. What Makes It Unique?
 - 5.2.3. For Whom?
- 5.3. Procreate
 - 5.3.1. iPad
 - 5.3.2. In the industry
 - 5.3.3. Future
- 5.4. Alternative Programs
 - 5.4.1. Krita
 - 5.4.2. Aseprite
 - 5.4.3. Others
- 5.5. Photoshop Interface
 - 5.5.1. Data Science
 - 5.5.2. Personalization
 - 5.5.3. Advice
- 5.6. Photoshop Layers
 - 5.6.1. Layer Styles
 - 5.6.2. Mask Layer
 - 5.6.3. Advice
- 5.7. Photoshop Brushes
 - 5.7.1. Where to Find?
 - 5.7.2. Create your Own
 - 5.7.3. Use
- 5.8. Format and Dimensions
 - 5.8.1. JPG vs. PNG
 - 5.8.2. Bits
 - 5.8.3. Image Resolution

- 5.9. Color in Photoshop
 - 5.9.1. One Layer
 - 5.9.2. Multiple Layers
 - 5.9.3. Advice
- 5.10. Digitized from Traditional Media
 - 5.10.1. Scanning
 - 5.10.2. Photoshop Editing
 - 5.10.3. Erase Colors

Module 6. 2D in the Video Game Industry

- 6.1. Digital Entertainment Industry
 - 6.1.1. Currently
 - 6.1.2. Competition
- 6.2. Concept Art
 - 6.2.1. Importance
 - 6.2.2. Types
 - 6.2.3. Movies/Video Games
- 6.3. Illustration
 - 6.3.1. Illustration for Video Games
 - 6.3.2. Uses
 - 6.3.3. Recommendations
- 6.4. UI Artist
 - 6.4.1. Use
 - 6.4.2. Design
 - 6.4.3. History
- 6.5. Environment Artist
 - 6.5.1. Difference
 - 6.5.2. Importance
 - 6.5.3. India
- 6.6. Pixel Art
 - 6.6.1. Currently
 - 6.6.2. Advice
 - 6.6.3. Programs
- 6.7. Animators
 - 6.7.1. 3D
 - 672 2D in Video Games
 - 6.7.3. Advice

- 6.8. Storyboarder
 - 6.8.1. Importance
 - 6.8.2. Large Studios
 - 6.8.3. In Video Games
- 6.9. Splash Art
 - 6.9.1. Online
 - 6.9.2. Currently
 - 6.9.3. Advice
- 6.10. Art Director
 - 6.10.1. Importance
 - 6.10.2. India
 - 6.10.3. Competition

Module 7. Anatomy

- 7.1. Lace and Organic Shapes
 - 7.1.1. Practice
 - 7.1.2. Complexity
 - 7.1.3. Routine
- 7.2 References
 - 7.2.1. Live
 - 7.2.2. Websites
 - 7.2.3. Good References
- 7.3. Skeleton Simple Shapes
 - 7.3.1. Understanding
 - 7.3.2. About Images
 - 7.3.3. Simplify
- 7.4. Complex Skeleton
 - 7.4.1. Progress
 - 7.4.2. Nomenclature
 - 7.4.3. From Simple to Complex
- 7.5. Muscles
 - 7.5.1. About References
 - 7.5.2. Muscles for Utility
 - 7.5.3. Body Types

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- 7.6. Cranium
 - 7.6.1. Structure
 - 7.6.2. Loomins
 - 7.6.3. Advice
- 7.7. The Human Face
 - 7.7.1. Proportions
 - 7.7.2. Common Errors
 - 7.7.3. Advice
- 7.8. Anatomy Profile
 - 7.8.1. Advice
 - 7.8.2. Differences
 - 7.8.3. Construction
- 7.9. Anatomy 3/4
 - 7.9.1. What to Consider
 - 7.9.2. Advice
 - 7.9.3. Differences
- 7.10. Color of the Human Body
 - 7.10.1. Translucency
 - 7.10.2. Color in the Shadows
 - 7.10.3. Tones

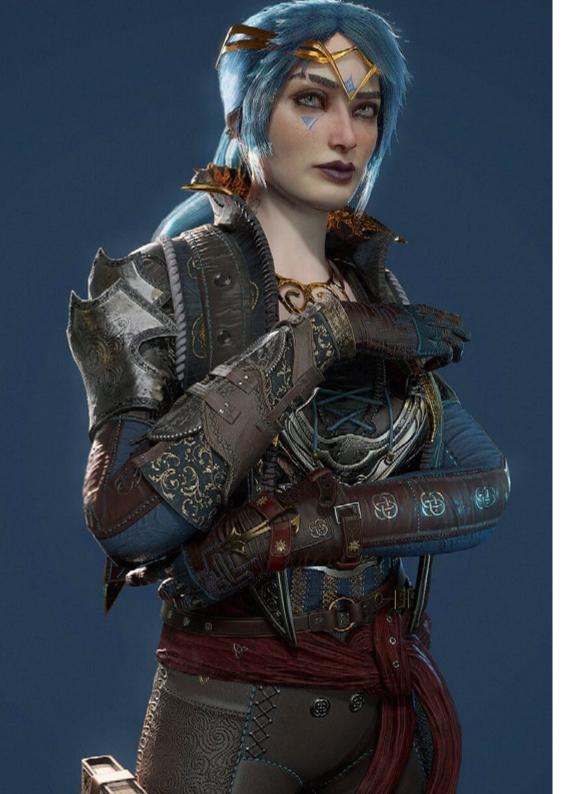
Module 8. Develop Drawing

- 8.1. Drawing from Imagination
 - 8.1.1. Start
 - 8.1.2. Practices
 - 8.1.3. Advice
- 8.2. Search and Development of References
 - 8.2.1 Different References
 - 8.2.2. Pinterest
 - 8.2.3. References to Avoid
- 8.3. Routines
 - 8.3.1. Routine
 - 8.3.2. Enjoying Your Studies
 - 8.3.3. Breaks

- 8.4. Drawing of Poses
 - 8.4.1. Pages
 - 8.4.2. Time
 - 8.4.3. Daily
- 8.5. Develop a Notebook
 - 8.5.1. What Notebook?
 - 8.5.2. When
 - 8.5.3. Contents
- 8.6. Getting out of the Comfort Zone
 - 8.6.1. Change
 - 8.6.2. Abstraction
- 8.7. Testing Styles
 - 8.7.1. Authors
 - 8.7.2. Different
 - 8.7.3. Study it
- 8.8. Buscar feedback
 - 8.8.1. Friendships
 - 8.8.2. Social media
 - 8.8.3. Do Not Take It Personally
- 8.9. Participate in Communities
 - 8.9.1. Online Communities
 - 8.9.2. City Events
- 8.10. Improving the Fundamentals
 - 8.10.1. Practices
 - 8.10.2. Back
 - 8.10.3. Redo

Module 9. Design in Video Games

- 9.1. Video Game Design
 - 9.1.1. Design and Video Games
 - 9.1.2. Concept
- 9.2. Ideation
 - 9.2.1. References
 - 9.2.2. Written
 - 9.2.3. Sketches



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9.3.	Iteration

9.3.1. Silhouettes

9.3.2. Advice

9.3.3. Shape Design

9.4. Character Design

9.4.1. Psychology of the Character

9.4.2. Color

9.4.3. Details

9.5. Props Design

9.5.1. Shape

9.5.2. Uses

9.5.3. Importance

9.6. Scenario Design

9.6.1. Composition

9.6.2. Details

9.6.3. Depth

9.7. Clothing Design

9.7.1. Reference:

9.7.2. Inspiration

9.7.3. Originality

9.8. Color in Design

9.8.1. Meaning

9.8.2. Psychology

9.8.3. Focal Points

9.9. Utility on Site

9.9.1. Video Game Industry

9.9.2. 3D Equipment

9.9.3. Project

9.10. Artistic Show Design

9.10.1. Pitch Deck

9.10.2. Finished Work

9.10.3. Cleaning

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Module 10. Art Industry for Videogames: Musts

- 10.1. Professional Image
 - 10.1.1. Showcase your Work
 - 10.1.2. Popularity
 - 10.1.3. Communities
- 10.2. Portfolio
 - 10.2.1. Pages
 - 10.2.2. Physical
 - 10.2.3. Advice
- 10.3. Submitting Jobs
 - 10.3.1. Clean Sketches
 - 10.3.2. Mount
 - 10.3.3. Format
- 10.4. Portfolio
 - 10.4.1. Advice
 - 10.4.2. Language:
 - 10.4.3. Date:
- 10.5. Practices
 - 10.5.1. Relations
 - 10.5.2. Hybrid
- 10.6. Social media
 - 10.6.1. Art Station
 - 10.6.2. LinkedIn
 - 10.6.3. Instagram
- 10.7. Web
 - 10.7.1. Platforms
 - 10.7.2. Portfolio
 - 10.7.3. Contact
- 10.8. Teamwork
 - 10.8.1. Advice
 - 10.8.2. Communication
 - 10.8.3. Importance
- 10.9. Telecommuting
 - 10.9.1. Timetable
 - 10.9.2. Discipline
 - 10.9.3. Language:

Module 11. The Project and the Unity Graphics Engine

- 11.1. The Design
 - 11.1.1. Pureref
 - 11.1.2. Scaling
 - 11.1.3. Differences and Limitations
- 11.2. Project Planning
 - 11.2.1. Modular Planning
 - 11.2.2. Blockout
 - 11.2.3. Assembly
- 11.3. Visualization in Unity
 - 11.3.1. Setting up Unity for Oculus
 - 11.3.2. The Oculus App
 - 11.3.3. Collision and Camera Adjustments
- 11.4. Visualization in Unity: Scene
 - 11.4.1. Setting up Scene for VR
 - 11.4.2. Export of APKs
 - 11.4.3. Installing APKs on Oculus Quest 2
- 11.5. Materials in Unity
 - 11.5.1. Standard
 - 11.5.2. Unlit: Features of This Material and When to Use It
 - 11.5.3. Optimization
- 11.6. Textures in Unity
 - 11.6.1. Importing Textures
 - 11.6.2. Transparency
 - 11.6.3. Sprite
- 11.7. Lighting
 - 11.7.1. VR Lighting
 - 11.7.2. Lighting Menu in Unity
 - 11.7.3. VR Skybox
- 11.8. Lighting: Lightmapping
 - 11.8.1. Lightmapping Settings
 - 11.8.2. Types of Lights
 - 11.8.3. Emissive

- 11.9. Lighting 3: Baking
 - 11.9.1. Baking
 - 11.9.2. Ambient Occlusion
 - 11.9.3. Optimization
- 11.10. Organizing and Exporting
 - 11.10.1. Folders
 - 11.10.2. Prefab
 - 11.10.3. Exporting and Importing Unity Packages

Module 12. Blender

- 12.1. Interface
 - 12.1.1. Software Blender
 - 12.1.2. Controls and Shortcuts
 - 12.1.3. Scenes and Customization
- 12.2. Modeling
 - 12.2.1. Data Science
 - 12.2.2. Mesh
 - 12.2.3. Curves and Surfaces
- 12.3 Modifiers
 - 12.3.1. Modifiers
 - 12.3.2. How Are They Used?
 - 12.3.3. Types of Modifiers
- 12.4. Hard Surface Modeling
 - 12.4.1. Prop Modeling
 - 12.4.2. Prop Modeling's Evolution
 - 12.4.3. Prop Modeling's Final Assessment
- 12.5. Materials
 - 12.5.1. Assignment and Components
 - 12.5.2. Creating Materials
 - 12.5.3. Creating Procedural Materials
- 12.6. Animation and Rigging
 - 12.6.1. Keyframes:
 - 12.6.2. Armatures
 - 12.6.3. Constraints

- 12.7. Simulation
 - 12.7.1. Fluids
 - 12.7.2. Hair and Particles
 - 12.7.3. Clothing
- 12.8. Rendering
 - 12.8.1. Cycles and Eevee
 - 12.8.2. Light
 - 12.8.3. Cameras
- 12.9. Grease Pencil
 - 12.9.1. Structure and Primitives
 - 12.9.2. Properties and Modifiers
 - 12.9.3. Examples:
- 12.10. Geometry Nodes
 - 12.10.1. Attributes
 - 12.10.2. Types of Nodes
 - 12.10.3. Practical Example

Module 13. 3ds MAX

- 13.1. Interface Set-up
 - 13.1.1. Project Start
 - 13.1.2. Automatic and Incremental Saving
 - 13.1.3. Measuring Units
- 13.2. The Create Menu
 - 13.2.1. Objects
 - 13.2.2. Light
 - 13.2.3. Cylindrical and Spherical Objects
- 13.3. The Modify Menu
 - 13.3.1. The Menu
 - 13.3.2. Button Configuration
 - 13.3.3. Uses
- 13.4. Edit Poly: Polygons
 - 13.4.1. Edit Poly Mode
 - 13.4.2. Edit Polygons
 - 13.4.3. Edit Geometry

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13.5 Edit Poly: Selection

10.0.	Lait i Oi	j. Ocicotion
	13.5.1.	Selection
	13.5.2.	Soft Selection
	13.5.3.	IDs and Smoothing Groups
13.6.	Hierarc	hy Menu
	13.6.1.	Pivot Conditions
	13.6.2.	Reset XFom and Freeze Transform
	13.6.3.	Adjusting the Pivot Menu
13.7.	Materia	l Editor
	13.7.1.	Compact Material Editor
	13.7.2.	Slate Material Editor
	13.7.3.	Multi/Sub-Object
13.8.	Modifie	r List
	13.8.1.	Modeling Modifiers
	13.8.2.	Modeling Modifier Evolution
	13.8.3.	Modeling Modifier Final Assessment
13.9. XView and Non-Quads		and Non-Quads
	13.9.1.	XView
	13.9.2.	Checking for Errors in Geometry
	13.9.3.	Non-Quads
13.10	. Exportir	ng to Unity
	13.10.1	. Triangulating the Asset
	13.10.2	. DirectX u OpenGL for Normal Maps
	13.10.3	. Conclusions
Mod	ule 14.	ZBrush

- 14.1. ZBrush
 - 14.1.1. Polymesh
 - 14.1.2. Subtools
 - 14.1.3. Gizmo 3D
- 14.2. Creating Meshes
 - 14.2.1. Quick Mesh and Primitives
 - 14.2.2. Mesh Extract
 - 14.2.3. Booleans

- 14.3. Sculpting
 - 14.3.1. Symmetry
 - 14.3.2. Main Brushes
 - 14.3.3. Dynamesh
- 14.4. Masks
 - 14.4.1. Brushes and the Mask Menu
 - 14.4.2. Brush Masks
 - 14.4.3. Polygroups
- 14.5. Organic Prop K's Sculpting
 - 14.5.1. Sculpting Low Poly
 - 14.5.2. Low-Poly Sculpting Evolution
 - 14.5.3. Low Poly Sculpting Final Assessment
- 14.6. IMM Brushes
 - 14.6.1. Controls
 - 14.6.2. Inserting Multi Mesh
 - 14.6.3. Creating IMM Brushes
- 14.7. Curve Brushes
 - 14.7.1. Controls
 - 14.7.2. Creating Curve Brushes
 - 14.7.3. IMM Curve Brushes
- 14.8. High Poly
 - 14.8.1. Subdivisions and Dynamic Subdivisions
 - 14.8.2. HD-Geometry
 - 14.8.3. Projecting Noise
- 14.9. Other Types of Mesh
 - 14.9.1. MicroMesh
 - 14.9.2. NanoMesh

 - 14.9.3. ArrayMesh
- 14.10. High Poly Organic PropSculpting
 - 14.10.1. Prop Sculpting
 - 14.10.2. Prop Sculpting Evolution
 - 14.10.3. Prop Sculpting Final Assessment

Module 15. Retopology

- 15.1. Retopology in ZBrush-ZRemesher
 - 15.1.1. ZRemesher
 - 15.1.2. Guidelines
 - 15.1.3. Examples:
- 15.2. Retopology in ZBrush-Decimation Master
 - 15.2.1. Decimation Master
 - 15.2.2. Combining It with Brushes
 - 15.2.3. Workflow
- 15.3. Retopology in ZBrush-ZModeler
 - 15.3.1. Zmodeler
 - 15.3.2. Modes
 - 15.3.3. Correcting Meshes
- 15.4. Prop Retopology
 - 15.4.1. Hard Surface Prop Retopology
 - 15.4.2. Organic Prop Retopology
 - 15.4.3. Hand Retopology
- 15.5. Topogun
 - 15.5.1. Advantages of Topogun
 - 15.5.2. The Interface
 - 15.5.3. Import
- 15.6. Tools: Edit
 - 15.6.1. Simple Edit Tool
 - 15.6.2. Simple Create Tool
 - 15.6.3. Draw Tool
- 15.7. Tools: Bridge
 - 15.7.1. Bridge Tool
 - 15.7.2. Brush Tool
 - 15.7.3. Extrude Tool
- 15.8. Tools: Pipelines
 - 15.8.1. Tubes Tool
 - 15.8.2. Symmetry Set-Up
 - 15.8.3. Feature Subdivision and Map Baking

- 15.9. Head Retopology
 - 15.9.1. Facial Loops
 - 15.9.2. Mesh Optimization
 - 15.9.3. Export
- 15.10. Full Body Retopology
 - 15.10.1. Body Loops
 - 15.10.2. Mesh Optimization
 - 15.10.3. VR Requirements

Module 16. UVs

- 16.1. Advanced UVS
 - 16.1.1. Warnings
 - 16.1.2. Cuts
 - 16.1.3. Texture Density
- 16.2. Creating UVS in ZBrush-UVMaster
 - 16.2.1. Controls
 - 16.2.2. Unwrap
 - 16.2.3. Unusual Topology
- 16.3. UVMaster: Painting
 - 16.3.1. Control Painting
 - 16.3.2. Creating Seams
 - 16.3.3. Checkseams
- 16.4. UVMaster: Packing
 - 16.4.1. UV Packing
 - 16.4.2. Creating Islands
 - 16.4.3. Flatten
- 16.5. UVMaster: Clones
 - 16.5.1. Working With Clones
 - 16.5.2. Polygroups
 - 16.5.3. Control Painting
- 16.6. Rizom UV
 - 16.6.1. Rizom Script
 - 16.6.2. The Interface
 - 16.6.3. Importing With or Without UVS

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16.7. Seams and Cuts

16.7.1. Keyboard Shortcuts 16.7.2. 3D Panel 16.7.3. UV Panel 16.8. UV Unwrap and Layout Panel 16.8.1. Unfold 16.8.2. Optimize 16.8.3. Layout and Packing 16.9. UV: More Tools 16.9.1. Align, Straighten, Flip, and Fit 16.9.2. TopoCopy and Stack1 16.9.3. Edge Loop Parameters 16.10. Advanced UV Rizom 16.10.1. Auto Seams 16.10.2. UVs Channels 16.10.3. Texel Density Module 17. Baking 17.1. Model Baking 17.1.1. Preparing the Model for Baking 17.1.2. Baking Principles 17.1.3. Processing Options 17.2. Model Baking Painter 17.2.1. Baking in Painter 17.2.2. Low Poly Baking 17.2.3. High Poly Baking 17.3. Model Baking: Boxes 17.3.1. Using Boxes 17.3.2. Adjusting Distances 17.3.3. Computing Tangent Space per Fragment 17.4. Map Baking 17.4.1. Normal 17.4.2. ID 17.4.3. Ambient Occlusion

17.5. Map Baking: Curvatures 17.5.1. Curvature 17.5.2. Thickness 17.5.3. Improving Map Quality 17.6. Baking in Marmoset 17.6.1. Marmoset 17.6.2. Functions 17.6.3. Real-Time Baking 17.7. Setting Up the Document for Baking in Marmoset 17.7.1. High Poly and Low Poly in 3DS Max 17.7.2. Organizing the Scene in Marmoset 17.7.3. Verifying That Everything Is Correct 17.8. Bake Project Panel 17.8.1. Bake Group, High and Low 17.8.2. Geometry Menu 17.8.3. Load 17.9. Advanced Options 17.9.1. Output 17.9.2. Adjusting the Cage 17.9.3. Setting Up Maps 17.10. Baking 17.10.1. Maps

Module 18. Substance Painter

17.10.2. Result Preview

17.10.3. Baking Floating Geometry

- 18.1. Creating a Project
 18.1.1. Importing Maps
 18.1.2. UVs
 18.1.3. Baking
 18.2. Layers
 18.2.1. Types of Layers
 - 18.2.1. Types of Layers 18.2.2. Layer Options 18.2.3. Materials

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18.3.	Painting
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18.3.1. Types of Brushes

18.3.2. Filling Projections

18.3.3. Advance Dynamic Painting

18.4. Effects

18.4.1. Filling

18.4.2. Levels

18.4.3. Anchor Points

18.5. Masks

18.5.1. Alphas

18.5.2. Procedurals and Grunges

18.5.3. Hard Surfaces

18.6. Generators

18.6.1. Generators

18.6.2. Uses

18.6.3. Examples:

18.7. Filters

18.7.1. Filters

18.7.2. Uses

18.7.3. Examples:

18.8. Hard Surface Prop Texturing

18.8.1. Prop Texturing

18.8.2. Prop Texturing Evolution

18.8.3. Prop Texturing Final Assessment

18.9. Organic Prop Texturing

18.9.1. Prop Texturing

18.9.2. Prop Texturing Evolution

18.9.3. Prop Texturing Final Assessment

18.10. Render

18.10.1. IRay

18.10.2. Post-Processing

18.10.3. Col Use

Module 19. Marmoset

19.1. The Alternative

19.1.1. Import

19.1.2. Interface

19.1.3. Viewport

19.2. Classic

19.2.1. Scene

19.2.2. Tool Settings

19.2.3. History

19.3. Inside Scene

19.3.1. Render

19.3.2. Main Camera

19.3.3. Sky

19.4. Lights

19.4.1. Types

19.4.2. Shadow Catcher

19.4.3. Fog

19.5. Texture

19.5.1. Texture Project

19.5.2. Map Import

19.5.3. Viewport

19.6. Layers: Paint

19.6.1. Paint Layer

19.6.2. Fill Layer

19.6.3. Group

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19.7. Layers: Ad	ljustments
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19.7.1. Adjustment Layer

19.7.2. Input Processor Layer

19.7.3. Procedural Layer

19.8. Layers: Masks

19.8.1. Mask

19.8.2. Channels

19.8.3. Maps

19.9. Materials

19.9.1. Types of Material

19.9.2. Settings

19.9.3. Applying Them to the Scene

19.10. Dossier

19.10.1. Marmoset Viewer

19.10.2. Exporting Render Images

19.10.3. Exporting Videos

Module 20. Sci-Fi Environment

20.1. Sci-Fi Concept and Planning

20.1.1. References

20.1.2. Planning

20.1.3. Blockout

20.2. Implementation in Unity

20.2.1. Importing Blockout and Verifying Scaling

20.2.2. Skybox

20.2.3. Files and Preliminary Materials

20.3. Module 1: Floors

20.3.1. High to Low Modular Modeling

20.3.2. UVS and Baking

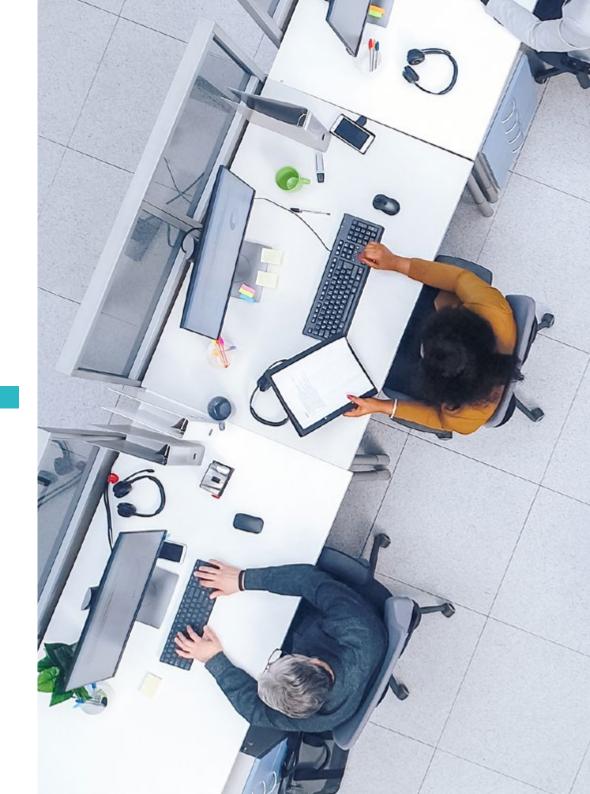
20.3.3. Texturing

20.4. Module 2: Walls

20.4.1. High to Low Modular Modeling

20.4.2. UVS and Baking

20.4.3. Texturing



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20.5. Module 3: Roof

- 20.5.1. High to Low Modular Modeling
- 20.5.2. Retopology, UVs, and Baking
- 20.5.3. Texturing
- 20.6. Module 4: Extras (Pipes, Railings, Etc.)
 - 20.6.1. High to Low Modular Modeling
 - 20.6.2. UVS and Baking
 - 20.6.3. Texturing
- 20.7. Hero Asset 1: Mechanical Doors
 - 20.7.1. High to Low Modular Modeling
 - 20.7.2. Retopology, UVs, and Baking
 - 20.7.3. Texturing
- 20.8. Hero Asset 2: Hibernation Chamber
 - 20.8.1. High to Low Modular Modeling
 - 20.8.2. Retopology, UVs, and Baking
 - 20.8.3. Texturing
- 20.9. In Unity
 - 20.9.1. Importing Textures
 - 20.9.2. Application of Materials
 - 20.9.3. Scene Lighting
- 20.10. End of Project
 - 20.10.1. VR Visualization
 - 20.10.2. Prefab and Export
 - 20.10.3. Conclusions



Take advantage of the online format and access the content whenever you want, and you can even download it to your tablet, smartphone or computer of choice"





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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 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.



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.



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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.

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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 adapted in 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 field. 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.



Methodology | 45 tech



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

Case Studies

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.

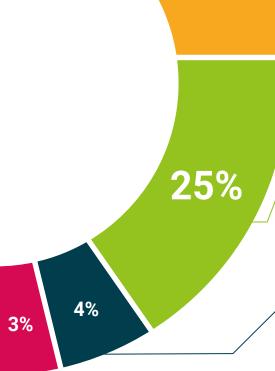


This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Testing & Retesting

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We periodically assess and re-assess students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



20%





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This program will allow you to obtain your **Advanced Master's Degree diploma in Digital Art for Video Games** 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: Advanced Master's Degree in Digital Art for Video Games

Modality: online

Duration: 2 years

Accreditation: 120 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.

health confidence people education information tutors guarantee accreditation teaching institutions technology learning



Advanced Master's Degree Digital Art for Video Games

- » Modality: online
- » Duration: 2 years
- » Certificate: TECH Global University
- » Credits: 120 ECTS
- » Schedule: at your own pace
- » Exams: online

