



# Index

01		02			
Introduction		Why Study an Internship Program?			
	р. 4		р. б		
03		04		05	
Objectives		Educational Plan		Where Can I Do the Internship Program?	
	p. 8		р. 10		p. 12
		06		07	
		General Conditions		Certificate	
			p. 16		р. 18

## 01 Introduction

The animation and video game industry has grown, in part, thanks to the quality of their designs and the realism they bring to each of the characters, scenes and objects that make them up. In this progress, creativity, but above all the mastery of the threedimensional modeling technique by graphic designers has been fundamental. This Internship Program allows the professional to acquire an excellent learning experience in a leading company of the sector and with specialists in this field. This internship will be carried out in an intensive manner over a period of 3 intensive weeks.

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You will develop, during this Internship Program, the most competitive skills for the creation of 3D characters through the most up-to-date techniques of Organic Modeling"



Technological innovation in 3D art has focused much effort on developing and updating digital applications for organic modeling. This is largely because the techniques and tools of this discipline are ideal for creating human characters and soft textures that can be used to give life to fabrics, hair or animal fur. The constant advance of these practical resources forces professionals in this sector to keep up to date with the resources most in demand by creative industries such as video games or animated films. In response to this reality, TECH has created this educational program focused on the development of its students' early practical experiences.

To this end, it has designed a unique educational model that links its students directly with relevant companies in the design sector. Over the course of 3 weeks, the specialist will exchange with experts with extensive knowledge of this productive environment. From that scope, you will develop skills to design 3D characters, proper posing and realistic human hair. You will also acquire practical skills for the creation of animals, taking into account complex polygonal structures.

This intensive internship, lasting 120 hours, will specialize in the development of UV mapping and facial retopology: both techniques are among the most distinguished in the 3D art industry. In this way, you will achieve polished designs that are widely sought after by the creative sector. Also, you will have the personalized guidance of a designated tutor that will allow you to easily insert yourself in the productive dynamics of the company and will guarantee you the link with projects where you will have to demonstrate your skills in the development of characters using software and technical strategies of Organic 3D Modeling.

## 02 Why Study an Internship Program?

Organic 3D Modeling has become a discipline widely demanded by studios dedicated to film animation and video game development. At the same time, these companies manage complex tools and work techniques that allow for an up-to-date dynamization of their projects. This Internship Program in Organic 3D Modeling will enable TECH students to master the most advanced software in this productive market and take advantage of its features to create more attractive and realistic characters. This practical knowledge will come to them from experts with a keen specialization.

Through this educational model, you will acquire specialized practical knowledge through the personalized guidance of experts located in the most select companies in the field of 3D modeling"

#### 1. Updating from the Latest Technology Available

Through this program, the student will acquire an up-to-date mastery of the most complex technological applications within Organic 3D Modeling. Upon completion of this Internship Program, students will be able to master applications such as Zbrush Sculpting and Maya Modeling. At the same time, they will be able to configure the Unreal Engine for an optimal organization of their creative projects.

#### 2. Gaining In-depth Knowledge from the Experience of Top Specialists

During this practical learning opportunity, TECH students will develop professional skills alongside leading experts dedicated to 3D art. These specialists have a distinguished track record in creative industries as diverse as video games and animated films. In this way, students will acquire a holistic vision of the different work scenarios within their reach.

### 3. Getting into World-Class 3D Modeling Environments

For its Internship Programs, TECH meticulously chooses the centers where it will send its students for 3 weeks of intensive learning. In these companies, students will be able to see how the day-to-day work of a professional area as demanding, rigorous and exhaustive as Organic 3D Modeling is carried out.



### Organic 3D Modeling | 07 tech

### 4. Putting the acquired knowledge into daily practice from the very first moment

TECH wants to provide you in a fast and flexible way with the most requested professional skills in the 3D art industries. To this end, it has configured a 100% practical learning model that is a complete departure from other academic syllabus where long hours of theoretical lectures are the norm. The skills acquired during this program will be of great use in their future work, in which they will be distinguished by their up-to-date experiences.

### 5. Expanding the Boundaries of Knowledge

TECH offers the possibility of doing this Internship Program, not only in national, but also in international centers. In this way, the specialist will be able to expand their boundaries and keep up to date with the best professionals, who practice in top 3D design companies and on different continents. A unique opportunity that only TECH, the largest online university in the world, could offer.

You will have full practical immersion at the center of your choice"

# 03 **Objectives**

With the help of this Internship Program, TECH students will distinguish themselves from other professionals in the job market by their deep understanding of the tools and techniques of Organic 3D Modeling. This will be possible thanks to the rigor of the up-todate contents taught in a practical way in this program of excellence.



**General Objectives** 

- Master the latest techniques that facilitate the realization of facial retopologies of three-dimensional characters
- Manage digital technologies that allow the texturing of soft surfaces such as tissues and skin in Organic 3D Modeling
- Manage the tools and practical work strategies for the post-production of threedimensional scenes using highly complex computer programs







### **Specific Objectives**

- Develop knowledge about the different types of lights, atmospheres, particles and fog, how to place different types of cameras and how to take pictures to have our composition in different ways
- Render Blender practice models with the two types of render engines Eevee and Cycles
- Review the different types of reptiles and how to create scales with Displacement maps and Alphas
- Focus anatomical knowledge in simpler, cartoon-like forms
- Practice different types of complex patterns in Marvelous Designer
- See the different use of hairbrushes in ZBrush
- Develop the learning of model posing by means of different techniques.
- Study the most optimal way to UV in Maya and UDIM systems
- Create advanced full body and face retopology in Maya
- Develop the highly detailed human body

Advance your professional career after completing this Internship Program. Click and enroll"

## 04 Educational Plan

The Internship Program of this course in Organic 3D Modeling is designed for students to perfect their technical skills alongside professional experts in this field. To do so, you will be in an internship program for 3 weeks, from Monday to Friday with 8-hour consecutive days in one of the leading companies in the audiovisual field. In addition, the TECH teaching team will be helping students during this period to successfully achieve their professional goals and acquire an education in line with the current demands of the industry.

In this internship program, of a completely practical nature, the activities are aimed at developing and perfecting the skills necessary for the provision of graphic design services, which require a high level of qualification and are oriented to the specific training for the exercise of the activity, in a reference company in the audiovisual industry and virtual environments.

An excellent opportunity to learn by working with a company that will allow you to use the most widely used software in the industry to develop three-dimensional creations of human figures, creatures or scenarios. The internship program in the company will consist of 120 hours in a professional environment where students will be able to develop their full artistic potential, express their ideas and create high quality creations. All this oriented to its inclusion in the world of video games or animated films. The practical education be carried out with the active participation of the student performing the activities and procedures of each area of competence (learning to learn and learning to do), with the accompaniment and guidance of teachers and other training partners that facilitate teamwork and multidisciplinary integration as transversal competencies for the praxis of physical therapy (learning to be and learning to relate).

The procedures described below will be the basis of the practical part of the training, and their implementation will be subject to the center's own availability and workload, the proposed activities being the following:



Receive specialized education in an institution that can offer you all these possibilities, with an innovative academic program and a human team that will help you develop your full potential"

### Organic 3D Modeling | 11 tech



Module	Practical Activity		
Technologies and software applied to organic 3D modeling	Advanced facial retopology with Maya Modeling		
	Manage a good workflow for Zbrush Sculpting		
	Texture models in Substance Painter		
	Refine hair sculpting with Xgen Advanced		
	Export clothing files from Marvelous Designer to Zbrush		
	Convert a Low Poly model to High Poly, sculpting the head, hair and face		
	Configure Unreal Engine for optimal project organization		
	Illuminate concrete models in Maya with Arnold Render		
	Create high-level UVs in Maya		
	Use Blender for sculpting and retopology tasks		
	Sculpt hair with different hair styling bases in Zbrush		
	Create a composition of a complete human figure		
Organic 3D modeling techniques	Perform post-production rendering in Photoshop		
	Create a clean topology from scratch for the models to be worked on		
	Create a good posing and final presentation of the worked model		
	Handle environment post-production in Unreal Engine for a good rendering		
	Pass models and controls from Maya and ZBrush to Blender		
	Sculpt an anatomically correct body, taking into account head, torso and arm dimensions		
	Sculpting specific parts such as hands and legs with attention to detail		
	Create rigging and posing of characters in Maya and Zbrush respectively		
Organic 3D Modeling for characters and animals	Optimize hair geometry and modeling for movies, with specific motion physics		
	Perform adequate and optimal rendering of clothing and lighting		
	Work on the different anatomy of the skull, spine and rib cage of different creatures		
	Work with common animal musculature and muscle-bone synergies		
	Create a coat suitable for the type of animal you are working with		
Organic 3D modeling of clothes and soft surfaces	Create simple and complex clothing patterns with accessories in Marvelous Designer		
	Refine hair sculpting with Xgen Advanced		
	Create realistic environments and terrains in Unreal Engine		

## 05 Where Can I Do the Internship Program?

In its maxim of offering quality education, TECH has selected companies of reference in the area of design within the audiovisual and video game sector. Thanks to it, students will acquire during their internship an apprenticeship according to the demands of the industry and the latest technologies used.

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An Internship Program in which you will learn with the best professionals in the sector"





### Organic 3D Modeling | 13 tech

The student will be able to do this program at the following centers:



#### Goose & Hopper

Country Spain City Valencia

Management: La Marina de Valencia, Muelle de la Aduana S/N Edificio Lanzadera 46024

Advertising, design, technology and creative agency

#### Related internship programs:

- Digital Communication and Reputation Management - Organic 3D Modeling



Lab66

Country Spain City Navarra

Management: Tomás Caballero nº2, 1ª Planta Oficina 9, 31005

Studio specialized in Virtual Reality and 3D Rendering

Related internship programs: - Organic 3D Modeling - Video Game Programming

### tech 14 | Organic 3D Modeling



### Goose & Hopper

 Country
 City

 Mexico
 Michoacán de Ocampo

Management: Avenida Solidaridad Col. Nueva Chapultepec Morelia, Michoacan

Advertising, design, technology and creative agency

#### Related internship programs:

- Digital Communication and Reputation Management - Organic 3D Modeling





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Make the most of this opportunity to surround yourself with expert professionals and learn from their work methodology"

## 06 General Conditions

### **Civil Liability Insurance**

This institution's main concern is to guarantee the safety of the trainees and other collaborating agents involved in the internship process at the company. Among the measures dedicated to achieve this is the response to any incident that may occur during the entire teaching-learning process.

To this end, this educational entity undertakes to take out civil liability insurance to cover any eventuality that may arise during the stay at the internship center.

This liability policy for interns will have broad coverage and will be taken out prior to the start of the practical training period. That way professionals will not have to worry in case of having to face an unexpected situation and will be covered until the end of the internship program at the center.



### **General Conditions of the Internship Program**

The general terms and conditions of the internship agreement for the program are as follows:

1. TUTOR: During the Internship Program, students will be assigned with two tutors who will accompany them throughout the process, answering any doubts and questions that may arise. On the one hand, there will be a professional tutor belonging to the internship center who will have the purpose of guiding and supporting the student at all times. On the other hand, they will also be assigned with an academic tutor, whose mission will be to coordinate and help the students during the whole process, solving doubts and facilitating everything they may need. In this way, the student will be accompanied and will be able to discuss any doubts that may arise, both clinical and academic.

**2. DURATION:** The internship program will have a duration of three continuous weeks, in 8-hour days, 5 days a week. The days of attendance and the schedule will be the responsibility of the center and the professional will be informed well in advance so that they can make the appropriate arrangements.

**3. ABSENCE**: If the students does not show up on the start date of the Internship Program, they will lose the right to it, without the possibility of reimbursement or change of dates. Absence for more than two days from the internship, without justification or a medical reason, will result in the professional's withdrawal from the internship, therefore, automatic termination of the internship. Any problems that may arise during the course of the internship must be urgently reported to the academic tutor. **4. CERTIFICATION**: Professionals who pass the Internship Program will receive a certificate accrediting their stay at the center.

**5. EMPLOYMENT RELATIONSHIP:** The Internship Program shall not constitute an employment relationship of any kind.

**6. PRIOR EDUCATION:** Some centers may require a certificate of prior education for the Internship Program. In these cases, it will be necessary to submit it to the TECH internship department so that the assignment of the chosen center can be confirmed.

7. DOES NOT INCLUDE: The Internship Program will not include any element not described in the present conditions. Therefore, it does not include accommodation, transportation to the city where the internship takes place, visas or any other items not listed

However, students may consult with their academic tutor for any questions or recommendations in this regard. The academic tutor will provide the student with all the necessary information to facilitate the procedures in any case.

## 07 **Certificate**

This program will allow you to obtain your **Internship Program diploma in Organic 3D Modeling** endorsed by **TECH Global University**, the world's largest online university.

**TECH Global University** is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: Internship Program in Organic 3D Modeling

Duration: 3 weeks

Attendance: Monday to Friday, 8-hour consecutive shifts

Accreditation: 5 ECTS





