





Internship Program
Veterinary Traumatology
and Orthopedic Surgery

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# 01 Introduction

This high-level program specializes veterinary professionals in Traumatology and Orthopedic Surgery through practical training tutored by professionals with extensive experience and international recognition in this field. It is, therefore, an eminently practical academic experience that will teach the student from real cases and patients. In this way, TECH offers the student a unique program in the market that stands out for its effective learning methodology.

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Improve your skills as a professional in the area of traumatology and bring quality of life to pets by taking this training"





## Veterinary Traumatology and Orthopedic Surgery | 05 tech



With this Internship Program, the students will acquire new specialized and advanced skills and knowledge, based on real experience and practice in Veterinary Traumatology and Orthopedic Surgery.

The teaching team of this Internship Program in Veterinary Traumatology and Orthopedic Surgery has made a careful selection of the different state-of-the-art surgical techniques for experienced professionals working in the veterinary field, focusing also on anamnesis, physical examination of the patient, complementary medical tests and interpretation, differential diagnoses and treatment.

This Internship Program provides students with specialized tools and skills to successfully develop their professional activity in the wide environment of Traumatology and Orthopedic Surgery, working key skills such as knowledge of the reality and daily practice of the Veterinary Hospital, and develops responsibility in the monitoring and supervision of their work, as well as communication skills within the essential teamwork.



Enjoy an intensive 3-week stay in a reputable center and get up to date on the latest clinical procedures to achieve professional growth"



# 02 Why Study an Internship Program?

It has been scientifically proven that people acquire knowledge more easily with practical activity. After having undergone a theoretical training and understanding the most specific and effective techniques for bone repair and care of the animal in case of injuries and fractures, the practical activity must be applied in order to retain the knowledge much more easily. For this reason, TECH, aware of this reality, has designed a new teaching model through agreements with affiliated companies that will allow the students to stay in the classroom for 3 weeks, in 8-hour days from Monday to Friday. Thus, they will be involved in the processes related to Veterinary Traumatology and Orthopedic Surgery alongside important specialists who will share all their experiences to nurture the student with new techniques and applications of veterinary medicine in this specialty. Upon completion, students will have an ideal professional profile to take on great challenges in the area and profile themselves for the job improvements they desire.



This academic experience is only possible with TECH at the forefront of education in the world"

## 1. Updating from the latest technology available

The practice of veterinary orthopedic orthopedic surgery and traumatology comes to solve major problems in animals of different species and improve their quality of life. Thanks to the constant advances in science and technology, procedures have greatly improved the dynamics of all treatments and surgical processes. In this sense, TECH brings the students to the most advanced veterinary clinical center, equipped with the latest technological equipment for the student to experience all the latest developments in this area of care.

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

TECH chooses the best teachers for each of its programs. In this case, TECH has joined the clinical centers where veterinarians experts in Veterinary Traumatology and Orthopedic Surgery make life. The students will be able to deepen and update all their knowledge with an expanded vision, thanks to the experiences that will be shared by the teammates for 3 weeks.

## 3. Entering First-Class Clinical Environments

TECH carefully selects all available centers for Internship Programs. As a result, the specialist will have guaranteed access to a prestigious clinical environment in the field of veterinary medicine. In this way, you will be able to see the day-to-day work of a demanding, rigorous and exhaustive sector, always applying the latest theses and scientific postulates in its work methodology.



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

TECH innovates with this program in the current educational market. Students will not find another program like this one that allows them to choose a prestigious center in their country or another part of the world to carry out 100% practical training. An unparalleled experience that will improve your professional profile immediately.

## 5. Expanding the Boundaries of Knowledge

This program opens the door to a new possibility for its students, with the choice of a veterinary clinical center of national or international relevance. This way, the specialist will be able to expand their frontiers and catch up with the best professionals, who practice in first class centers and in 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"

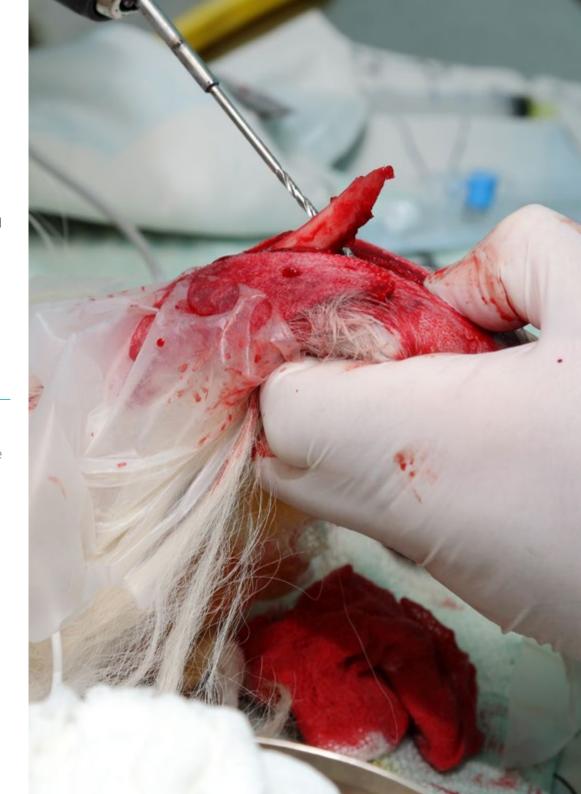
# 03 Objectives

The Internship Program in Veterinary Traumatology and Orthopedic Surgery is oriented to facilitate the performance of the professional dedicated to veterinary medicine with the latest advances and newest treatments in the sector. You will have access to the most updated and effective knowledge through a hospital stay designed with clinical and academic rigor, under the guidance of renowned professionals in a veterinary hospital center of the highest scientific quality and technological innovation.



## **General Objectives**

- Master the latest techniques, modern scientific postulates and application of cutting-edge technologies in Veterinary Traumatology and Orthopedic Surgery
- Incorporate the most effective methods, approaches and clinical analysis to daily work, supported by a team of prestigious experts in the area of Veterinary Traumatology and Orthopedic Surgery
- Know the specific approach and common cases that occur in the clinical environment of Veterinary Traumatology and Orthopedic Surgery







## **Specific Objectives**

- Substantiate knowledge of cytology and bone histology
- Develop bone physiology and its influence on the hormonal system governing bone in a patient with bone disease
- Determine how to carry out bone repair, clinical radiographic assessment and fracture
- Analyze the forces acting on the skeletal body causing stress and the absorption of that force depending on the magnitude and direction of the force absorbed by the body
- Examine the different types of bone repair that exist in a bone depending on the method of fixation
- Perform a physical examination of a patient in dynamics and statistics
- Differentiate the different orthopaedic diseases depending on the different symptoms found at the time of physical examination
- Use audiovisual methods to make an assessment for an orthopaedic physical examination such as normal speed video cameras, slow motion video, metric measurements and use of a goniometer
- Compile the different configurations of the Kirschner-Ehmer external tutor
- Analyse the advantages and disadvantages of using external fixators
- Establish post-surgical care for external tutors
- Develop a discussion regarding nailing technique
- Identify and apply the basic principles in the use of the intramedullary and locked nails used in fractures in dogs and cats
- Analyse the biomechanics and forces controlling the intramedullary nail in long bone fractures in dogs and cats
- Establish the methods of insertion, types and sizes of intramedullary nails used in fractures in dogs and cats

- Identify the advantages, disadvantages and complications of the use of the intramedullary nail in fractures in dogs and cats
- Analyse and understand the principles and uses of the locking nail in long bone fractures in dogs and cats
- Identify other uses of the intramedullary nail and ancillary methods applied to bone fractures in dogs and cats
- Examine the evolution of internal fixation with plates over the last 50 years
- Determine the characteristics of each of the most important systems used in the world
- Classify the different plate fixation systems for osteosynthesis in dogs and cats, in terms of form, size and function
- Detail the anatomy of the pelvic region as well as closely related regions



You will have the experience of professional experts who will contribute to the program with their knowledge in this area, making this practical training a unique opportunity for professional growth"

# 04 Educational Plan

The Internship Program of this program in Veterinary Traumatology and Orthopedic Surgery consists of a 3-week practical stay in a prestigious veterinary center. It is therefore constituted by a refresher course with a specialist.

This stay will allow you to see real cases alongside a professional team of reference in the veterinary area, applying the most innovative procedures of the latest generation in cardiology.

In this training proposal, completely practical in nature, the activities are aimed at developing and perfecting the skills necessary for the provision of veterinary care in areas and conditions that require a high level of qualification, and are oriented to the specific training for the exercise of the activity, in an environment of safety and high professional performance.

The practical education will 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 fellow trainees that facilitate teamwork and multidisciplinary integration as transversal competencies for Veterinary Traumatology and Orthopedic Surgery veterinary practice (learning to be and learning to relate).





## Veterinary Traumatology and Orthopedic Surgery | 11 tech

The procedures described below will form the basis of the practical part of the training, and their implementation is subject to both the suitability of the patients and the availability of the center and its workload, with the proposed activities being as follows:

Module	Practical Activity		
	Examine by means of orthopedic diagnostic technique in dynamic and static and in statics the young and mature bone structure		
Advanced diagnostics	Analyze through advanced methods the most commonly encountered orthopedic diseases: rupture of the anterior cruciate ligament, patellar dislocation, elbow dysplasia, hip dysplasia, shoulder osteochondritis Dissecans of the shoulder, tarsus, femur, canine panosteitis		
methods in veterinary traumatology	Verify through advanced methods other orthopedic diseases: radius curvature, hypertrophic osteodystrophy, hypertrophic osteoarthropathy, carpal flexor tendon contracture, scapulohumeral instability, Wobbler's syndrome and intervertebral disc disease, among many others		
	Perform diagnostic imaging and analysis: radiology, ultrasound, clinical laboratory, CT and MRI		
	Perform calcium-regulating hormone analysis and fracture biomechanics		
	Use different materials and tools effective in the patient's bone repair: external fixate of different types, various types of nails, connecting rod		
	Practice post-surgical care: cleaning of the fixator with acrylic, postoperative radiographic studies, gradual removal of the acrylic, care after fixator removal and repositioning of the acrylic fixator		
Advances in Veterinary Orthopedic Surgery	Evaluate different types of fractures, their causes, clinical history, evolution, treatment and postoperative period		
	Evaluate the different plate fixation systems 8 (AO/ASIF, ALPS, FIXIN)		
	Take care of instruments and material: disinfection, cleaning, rinsing, drying and lubrication		
	Practice proper selection of implants		
	Perform analysis and evaluation of the physiology and anatomy of the animal patient		
	Differentiate between non-surgical and surgical groups		
Advanced techniques	Manage postoperative fracture management		
of bone and joint repair	Perform surgical preparation		
	Prepare surgical instruments and equipment		
	Perform postoperative evaluations		

# 05 Where Can I Do the Internship Program?

With the aim of bringing quality education to the largest possible number of professionals, TECH offers students a Internship Program that can be taken in various specialized centers around the country. It is, therefore, a unique opportunity to learn from the hand of prestigious professionals without having to make uncomfortable trips.



Become a real expert in veterinary traumatology learning from the best professionals in the sector"



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



### **Hospital Veterinario Retiro**

Country City
Spain Madrid

Address: Av. de Menéndez Pelayo, 9

Veterinary hospital specialized in Nutrition and 24-hour emergency care

#### Related internship programs:

-Veterinary Traumatology and Orthopedic Surgery -Veterinary Emergencies in Small Animals



### Hospital Artemisa Cañaveral

Country City
Spain Madrid

Address: Francisco Grande Covian, local 1, 28052 Madrid

Veterinary hospital specialized in general care and 24-hour emergency assistance.

#### Related internship programs:

-Veterinary Anesthesiology -Veterinary Surgery in Small Animals



#### Animalia BCN MiVet

Country City Spain Barcelona

Address: Carrer de la Creu Coberta, 130, Barcelona

Veterinary Hospital in Barcelona with 24h attention 365 days a year

#### Related internship programs:

-Small Animal Dermatology -Physiotherapies and Rehabilitation of Small Animals



#### Hospital Veterinario Stolz Valencia MiVet

Country City
Spain Valencia

Address: C/ de Pintor Stolz, 67 Valencia

Reference clinic in the veterinary sector with more than 20 years of experience and 24 hours a day, 365 days a year service

#### Related internship programs:

-Small Animal Dermatology -Physiotherapies and Rehabilitation of Small Animals



### Hospital Veterinario Faycan Catarroja MiVet

Country City
Spain Valence

Address: C/ de Pintor Stolz, 67 Valencia

Comprehensive animal care clinic with 24-hour emergency and hospitalization service.

#### Related internship programs:

-Veterinary Anesthesiology -Veterinary Traumatology and Orthopedic Surgery



#### Centro Veterinario Onteniente MiVet

Country City
Spain Valence

Address: C/ de Pintor Stolz, 67 Valencia

Veterinary Hospital with state-of-the-art facilities and specialized care 24 hours a day

#### Related internship programs:

-Veterinary Anesthesiology
-Veterinary Traumatology and Orthopedic Surgery



### Centro Veterinario MiVet Faucan Cartagena

Country City
Spain Murcia

Address: Av. Juan Carlos I, 5, 30310 Cartagena, Murcia

Veterinary Hospital with state-of-the-art facilities and specialized care 24 hours a day.

#### Related internship programs:

-Veterinary Surgery in Small Animals -Veterinary Oncology in Small Animals



### Hospital Veterinario Miramadrid MiVet

Country City
Spain Madrid

Address: 63 C. Real, Paracuellos de Jarama. Madrid

Veterinary hospital with specialized care 24 hours a day and 7 days a week

#### Related internship programs:

-Physiotherapies and Rehabilitation of Small Animals**Z**-Veterinary Surgery in Small Animals

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## Hospital Veterinario Moncan MiVet

Country City Spain Madrid

Address: Av. de Montecarmelo, 55, Madrid

Veterinary hospital specialized in the comprehensive care of the sick animal and in clinical problems of difficult diagnosis.

#### Related internship programs:

-Veterinary Surgery in Small Animals -Veterinary Oncology in Small Animals



## Hospital Veterinario Tomás Bustamante MiVet

Country City
Spain Cantabria

Address: C. Lasaga Larreta, 4, 39300 Torrelavega, Cantabria

Veterinary Clinic for general and emergency care 24 hours a day

#### Related internship programs:

-Veterinary Traumatology and Orthopedic Surgery -Veterinary Surgery in Small Animals



## Cirugía Itinerante Rodrigo Zúñiga

Country

City

Spain

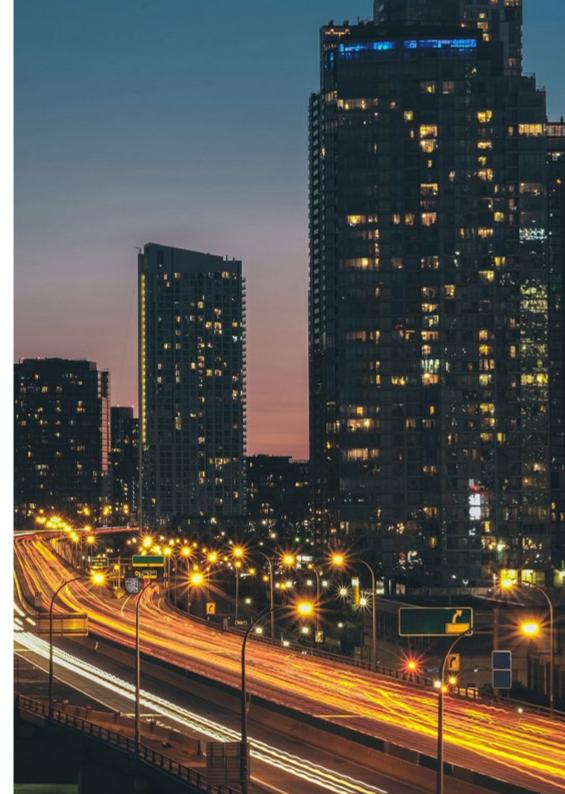
Madrid

Address: calle Alonso Cano 57 3ro izquierda. CP 28003. Madrid

Veterinary Center specialized in Animal Orthopedics and Traumatology.

#### Related internship programs:

-Veterinary Surgery in Small Animals -Veterinary Oncology in Small Animals







### Centro Veterinario Puebla

Country City Mexico Puebla

Address: Calzada zavaleta 115 Local 1 Santa Cruz Buenavista C.P 72154

> General veterinary center with 24-hour emergency care

#### Related internship programs:

-Veterinary Anesthesiology -Veterinary Cardiology in Small Animals



### Meds for pets

City Country Mexico Nuevo León

Address: Av. Venustiano Carranza 429 Centro C.P 64000

Veterinary Hospital for advanced and comprehensive care

#### Related internship programs:

-Veterinary Cardiology in Small Animals -Small Animal Ultrasound



#### **Aztekan Hospital** Veterinaro - Roma

Country City Mexico Mexico City

Address: San Luis 152 Col Roma C.P CDMX

24 hours Veterinary Hospital

#### Related internship programs:

-Veterinary Emergencies in Small Animals -Veterinary Cardiology in Small Animals



#### Centro Veterinario CIMA

Country Mexico Mexico City

Address: Av. Vía Adolfo López Mateos 70, Jardines de San Mateo, 53240 Naucalpan de Juárez, CDMX, Méx.

Clinical pet care center

#### Related internship programs:

-Small Animal Internal Medicine -Veterinary Oncology in Small Animals



## **Neuropets Veterinaria**

Country Mexico Mexico City

Address: Laguna Tamiahua #61, Anáhuac I Secc, Miguel Hidalgo, 11320 Del. Miguel Hidalgo, CDMX

Group of veterinarians with more than 10 years of experience in specialized veterinary medicine.

#### Related internship programs:

- Management and Administration of Veterinary Centers - Physiotherapy and Rehabilitation of Small Animals



## Servicio Médico Veterinario Integral

City Country Mexico Mexico City

Address: Retorno 2 de Ing Militares 30 Local 19, Lomas de Sotelo, Miguel Hidalgo, CDMX, CP 11200

Comprehensive veterinary clinic specializing in pet care

#### Related internship programs:

-Veterinary Traumatology and Orthopedic Surgery

# 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 entity commits to purchasing a civil liability insurance policy to cover any eventuality that may arise during the course of the internship at the 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 Veterinary Traumatology and Orthopedic Surgery** 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 Veterinary Traumatology and Orthopedic Surgery

Duration: 3 weeks

Attendance: Monday to Friday, 8-hour consecutive shifts

Accreditation: 5 ECTS



Mr./Ms. \_\_\_\_\_\_, with identification document \_\_\_\_\_ has successfully passed and obtained the title of:

#### Internship Program in Veterinary Traumatology and Orthopedic Surgery

This is a program of 120 hours of duration equivalent to 5 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024



Dr. Pedro Navarro Illana

qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country

nique TECH Code: AFWORD23S techtitute.com/certificate

tech global university Internship Program Veterinary Traumatology and Orthopedic Surgery

