

Postgraduate Certificate

Equine Reproduction and Neonatology





Postgraduate Certificate Equine Reproduction and Neonatology

- » Modality: online
- » Duration: 12 weeks
- » Certificate: TECH Global University
- » Accreditation: 12 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techitute.com/us/veterinary-medicine/postgraduate-certificate/equine-reproduction-neonatology

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01

Introduction

The equine veterinary professional needs special education in the whole reproductive area. This complete Postgraduate Certificate will be dedicated to the study of the urinary system in parallel to the reproductive system, given that, on many occasions, due to their topographic proximity and the fact that they share anatomical structures, their study is approached as a whole. A highly effective teaching and practical approach.





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A complete and total update in Equine Reproduction and Neonatology with the most complete and effective educational program on the market"

This Postgraduate Certificate aims to cover as much as possible all the responsibilities of the clinical veterinarian in relation to natural and routine procedures in healthy individuals (delivery and peripartum care, field surgeries such as castrations, etc.) as well as possible pathologies, diseases and disorders of the reproductive system of the male and female that may arise.

First, the medical pathologies of the male and female will be presented, followed by the surgical pathologies. All these issues will be presented in the necessary breadth, increasing the student's skills in traditional practices as well as in novel procedures and the latest researched techniques.

This program will also address the main alterations that can affect the urinary system; these can compromise the physical condition of the animal to the point of reducing its performance or even limiting the patient's life. Possible diagnostic tests will be reviewed and treatment alternatives will be extensively established.

As for the genital apparatus, it does not present the characteristic of being essential to maintain the life of the individual, but its function is indispensable for the perpetuation of the species. For horses, it is of great economic relevance, since one of the most important facets of the equestrian sector is the breeding and production of animals that will follow various paths; they may be again destined to reproduction for the improvement of the breed; they will go directly to auctions or sales of foals in private dealings, being destined for sports and leisure purposes; or, simply, they will be destined to the food channel and to obtain by-products.

The Postgraduate Certificate in Equine Reproduction and Neonatology will be complemented with a series of exclusive Masterclasses that will address the latest advances and techniques in the diagnosis and treatment of equine reproductive and neonatal pathologies. Students will have the opportunity to learn from a leading expert in the field of equine reproduction and neonatology, delving into the clinical practice of the highest international level.

This **Postgraduate Certificate in Equine Reproduction and Neonatology** contains the most complete and up-to-date scientific program on the market. The most important features include:

- ◆ The latest technology in online teaching software
- ◆ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ◆ Practical cases presented by practicing experts
- ◆ State-of-the-art interactive video systems
- ◆ Teaching supported by telepractice
- ◆ Continuous updating and recycling systems
- ◆ Autonomous learning: full compatibility with other occupations
- ◆ Practical exercises for self-assessment and learning verification
- ◆ Support groups and educational synergies: questions to the expert, debate and knowledge forums
- ◆ Communication with the teacher and individual reflection work
- ◆ Content that is accessible from any fixed or portable device with an Internet connection.
- ◆ Supplementary documentation databases are permanently available, even after the course



Discover how the best international experts in Reproduction and Neonatology have developed advanced techniques in this area"

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With a methodological design based on proven teaching techniques, this innovative course will use a range of teaching approaches to allow you to learn in a dynamic and effective way”

The program's teaching staff includes professionals from the industry 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 prepare for 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 course. For this purpose, the student will be assisted by an innovative interactive video system created by renowned and experienced experts.

With the experience of working professionals and the analysis of real success stories, in a high-impact educational approach.

Join the elite, with this highly effective program and open new paths to help you advance in your professional career.



02 Objectives

Our objective is to prepare highly qualified professionals for the work environment. An objective that is complemented, moreover, in a global manner, by promoting human development that lays the foundations for a better society. This objective is materialized in helping professionals to reach a much higher level of competence and control. A goal that, in just a few months you will be able to achieve, with a high intensity and effective education.



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If your goal is to reorient your capabilities towards new paths of success and development, this is the place for you: an educational program that aspires to excellence”



General Objectives

- ♦ Identify the different anatomical structures and pathologies of the digestive tract of the horse
- ♦ Develop and advance in the most frequent procedures to solve oral cavity pathologies
- ♦ Recognize the symptoms of digestive disorders
- ♦ Enable the clinician to correctly assess the systemic state of the animal and the consequent severity of the pathology
- ♦ Establish diagnostic protocols and generate optimized treatments and prognoses
- ♦ Establish optimal preventive medicine criteria and good management guidelines
- ♦ Establish an appropriate methodology for the examination of the horse with respiratory or cardiac problems
- ♦ Identify all clinical signs associated with respiratory or cardiovascular disease in equids
- ♦ Generate specialized knowledge of respiratory and cardiac auscultation
- ♦ Establish the specific clinical approach to the horse with a respiratory or cardiovascular disorder
- ♦ Identify the pathologies of the urinary system of the horse
- ♦ Establish diagnostic protocols to facilitate the recognition of patients with urinary pathology
- ♦ Expand the alternatives of possible treatments according to pathological situations
- ♦ Recognize the medical and surgical genital pathologies of the stallion and the dam mare, assess their extent and provide appropriate treatments for recovery and restoration of proper reproductive function
- ♦ Develop surgical techniques for the resolution of pathologies of the reproductive system that can be performed in the field



Specific Objectives

- ♦ Increase knowledge of pathologies affecting the urinary system
- ♦ Recognize and establish protocols for the management of patients with acute renal failure and chronic renal failure
- ♦ Establish working protocols for patients with post-renal urinary tract pathology
- ♦ Comprehend the predisposing factors that may condition the appearance this type of pathologies, and expand knowledge on the relevance of prevention
- ♦ Develop treatment alternatives available to the ambulatory veterinary clinician
- ♦ Delve into the pathology of the testicles, adnexal glands and penis, as well as their respective treatments
- ♦ Improve the productive management of the subfertile stallion and mare
- ♦ Identify and assess possible anomalies in the horse's ejaculate, applying the necessary procedures to guarantee its quality
- ♦ Identify, treat and prevent parasitic and infectious pathologies of the equine reproductive system
- ♦ Develop the pathologies of the female during the mating period and their possible treatments
- ♦ Develop the pathologies that affect the female during the gestation period and their possible treatments
- ♦ Develop the pathologies that affect the female during the pre- and post-partum period and their possible treatments
- ♦ Attend to the needs and demands of euthyroid delivery and placental assessment

- ♦ Develop the procedures involved in the care of dystocic labor and the performance of fetotomy
- ♦ Develop procedures that include the resolution of possible injuries associated with labor and delivery, such as correction of rectovestibular fistulas, reconstruction of external lacerations and repair of the perineal body
- ♦ Identify the neonatal patient with abnormal behaviors indicative of disease
- ♦ Establish lines of action for neonatal patients with sepsis, based on severity
- ♦ Determine work protocols for patients with symptoms of neonatal asphyxia syndrome
- ♦ Recognize the patient with cardio-respiratory symptomatology, being able to issue prognoses that determine their viability
- ♦ Develop field stabilization protocols for patients with bladder rupture or persistent urachus
- ♦ Identify the difference in diagnostic test results between neonates and adults
- ♦ Determine the use of diagnostic imaging tools that can be used in the field to diagnose pathologies in the foal, both in the neonatal and pediatric period. Use these methods accurately to diagnose and assess the different pathologies that may occur in these stages
- ♦ Develop the techniques of examination, diagnosis and parenteral and local treatment by joint lavage of septic arthritis in the neonate
- ♦ Develop techniques that can be performed in the field to solve surgical pathologies of the growing foal, such as umbilical hernia correction
- ♦ Compile knowledge of angular and flexural deformities of the foal. Develop different treatments and establish specificities according to patient age and the anatomical region affected
- ♦ Detail the medical treatments and application of resins, splints and orthopedic hardware used in the treatment of angular and flexural deformities
- ♦ Specify the techniques for delaying and stimulating bone growth used in the surgical treatment of angular deformities
- ♦ Determine the desmotomy and tenotomy techniques used in the treatment of flexural deformities
- ♦ Establish an appropriate methodology for the identification, treatment and prognostication of osteochondral injuries and subchondral bone cysts



If your objective is to broaden your skill set to pave new ways toward success and development, this is the course for you: a program that aspires to excellence”

03

Course Management

Within the concept of total quality of our program, we are proud to put at your disposal a teaching staff of the highest level, chosen for their proven experience. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.



A close-up photograph of a horse's head, showing its eye and the texture of its coat. The image is partially obscured by a diagonal teal and white graphic overlay.

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Leading professionals in the field have joined forces to teach you the latest advances in Equine Reproduction and Neonatology”

International Guest Director

As one of the foremost **veterinary surgeons** in equine care, **Dr. Andy Fiske-Jackson** is the **Deputy Director** of the **Royal Veterinary College Equine** in the United Kingdom. It is one of the leading experts in both equine patient care and in the development, education and innovation in the **Veterinary Field**.

This has allowed him to develop in a privileged environment, even receiving the James Bee Educator Awards for excellence in educational work.

In fact, Dr. Andy Fiske-Jackson is also part of the team of surgeons at the Equine Referral Hospital, focusing his work on orthopedic and **soft tissue** surgery. **As such, his main areas of focus are low performance, back pain, dental and sinus issues, digital flexor tendinopathies and regenerative medicine.**

In terms of **research**, his work leans between diagnostic techniques for digital flexor tendinopathies, clinical uses of objective **gait** analysis and objective assessment **of back pain**. His efficiency in this field has led him to actively participate in various international events and conferences, including congresses in Portugal, Czech Republic, Finland, Belgium, Hungary, Switzerland, Austria, Germany, Ireland, Spain and Poland.



Dr. Fiske-Jackson, Andy

- Deputy Director at the Royal Veterinary College Equine, Hertfordshire, UK
- Associate Professor of Equine Surgery at the Royal Veterinary College
- Equine Surgeon at the Equine Referral Hospital, Hertfordshire, UK.
- Veterinarian at Axe Valley Veterinary
- Veterinarian at Liphook Equine Hospital
- Veterinarian at the Society for the Protection of Animals Overseas, Morocco
- Degree from the University of Liverpool
- Master's Degree in Veterinary Medicine from the Royal Veterinary College

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Thanks to TECH you will be able to learn with the best professionals in the world"

Management



Dr. Varela del Arco, Marta

- Clinical veterinarian specialized in Equine Surgery and Sports Medicine
- Head of the Large Animal Department at the Complutense Veterinary Clinical Hospital
- Associate Professor, Department of Animal Medicine and Surgery, Complutense University of Madrid
- Teacher in different graduate and postgraduate courses, university specialization programs and master's degrees
- Director of Final Year Project in the Veterinary Degree and as a member of the tribunal of different doctoral theses
- PhD in Veterinary Medicine, Complutense University of Madrid
- Spanish Certificate of Equine Clinical Medicine (CertEspCEq)



Dr. De la Cuesta Torrado, María

- Veterinarian with clinical specialty in Equine Internal Medicine
- Associate Professor of the Department of Equine Medicine and Surgery at the CEU University Cardenal Herrera
- Doctorate in Advanced Studies from the Complutense University of Madrid
- Master's Degree in Equine Internal Medicine by Alfonso X el Sabio University
- Founder of MC Veterinaria
- Member of the: Organizing Committee of the 12th European College of Equine Internal Medicine Congress, Board of Directors of the Spanish Society of Ozone Therapy, Equine Clinicians Commission of the Official College of Veterinarians of Valencia, Spanish Association of Equine Veterinarians (AVEE), Scientific Committee and Coordinator of courses and congresses in the area of Ozone Therapy, supported by continuing education credits granted by the National Health System

Professors

Dr. Aguirre Pascasio, Carla

- ♦ Doctor in Veterinary Medicine from the University of Murcia
- ♦ Postgraduate degree in equine physiotherapy from the University of Barcelona
- ♦ Master in Business and Administration by ENAE Business School, Murcia
- ♦ Certificate in Internal Medicine from the Royal Veterinary College of London and by the University of Liverpool
- ♦ Certified in Soft Tissue Surgery by the Royal Veterinary College of London and by the University of Liverpool
- ♦ Spanish Certificate in Equine Clinical Practice from the Spanish Veterinary Council
- ♦ Eligible en el ECEIM (European College of Equine Internal Medicine)
- ♦ Fellowship at Casal do Rio Equine Hospital

Dr. Iglesias García, Manuel

- ♦ Clinical Veterinarian and Surgeon at the Veterinary Clinical Hospital of the University of Extremadura
- ♦ Director of Final Year Project in the Veterinary Degree at the University of Extremadura
- ♦ Collaboration in teaching interns and students of the Veterinary Degree during the Master's Degree in Equine Surgery at the University of Extremadura
- ♦ Professor of the Master's Degree in Large Animal Internship at the University of Extremadura
- ♦ Doctor in Veterinary Medicine from Alfonso X El Sabio University
- ♦ Master's Degree in Equine Surgery and obtained the Master's Degree in Equine Surgery and obtaining the title of General Practitioner in Equine Surgery by the European School of Veterinary Postgraduate Studies
- ♦ Master's Degree in Equine Surgery at the Veterinary Hospital of Alfonso X el Sabio University
- ♦ Spanish Certificate in Equine Clinical Medicine (CertEspCEq)

Dr. Muñoz Morán, Juan Alberto

- ♦ Head of Equine Surgery at the Sierra de Madrid Veterinary Hospital
- ♦ Editor of the Journal of Equine Veterinary Medicine and Surgery, Equinus
- ♦ Equine surgery clinician at the Montreal Veterinary University
- ♦ Equine surgery clinician at the Veterinary University of Lyon
- ♦ Surgeon at Grand Renaud Veterinary Clinic
- ♦ Surgeon at the Equine Hospital Aznalcóllar
- ♦ Professor and coordinator of several university programs, both theoretical and practical, at the Veterinary University of Pretoria and at the Alfonso X El Sabio University
- ♦ Head of the Postgraduate Degree in Sports Medicine and Equine Surgery at Alfonso X El Sabio University
- ♦ Doctor of Veterinary Science from the Complutense University of Madrid
- ♦ Certified by the European College of Veterinary Surgeons
- ♦ Diploma in Experimental Animals Category C from the University of Lyon
- ♦ Master's Degree in Veterinary Science from the University Alfonso X el Sabio
- ♦ Residency in Large Animal Surgery at the Veterinary University of Lyon
- ♦ Internship in Equine Surgery at London Equine Hospital
- ♦ Internship in Equine Medicine and Surgery at the Veterinary University of Lyon
- ♦ Member of the Examination Committee of the European College of Veterinary Surgeons

Dr. López San Román, Javier

- ♦ Veterinarian member of the Equine Surgery Service of the Complutense Clinical Veterinary Hospital
- ♦ Professor of the Department of Animal Medicine and Surgery of the Complutense University of Madrid and deputy director of the Department.
- ♦ Assistant Professor at the LRU University School
- ♦ Professor of Veterinary Medicine at national universities such as Las Palmas de Gran Canaria, Córdoba and Extremadura, and abroad Trás-os-Montes e Alto Douro, National Veterinary School of Lyon, National University of Litoral in Argentina
- ♦ Professor in different undergraduate and postgraduate courses, university specialization programs and masters, both national and international, and coordinator of different subjects and courses in the Veterinary Degree
- ♦ Reviewer of scientific articles in several journals indexed in the Journal Citation Report
- ♦ Deputy Director of the Department of Animal Medicine and Surgery, Complutense University of Madrid
- ♦ PhD in Veterinary from the Complutense University of Madrid
- ♦ Certified by the European College of Equine Veterinary Surgery

Dr. Manso Díaz, Gabriel

- ♦ Clinical veterinarian, member of the Diagnostic Imaging Service at the Complutense Veterinary Clinical Hospital
- ♦ Assistant Professor, Department of Animal Medicine and Surgery, Complutense University of Madrid
- ♦ Collaborator in the practical teaching at the Department of Animal Medicine and Surgery at the Complutense University of Madrid
- ♦ Regular speaker at courses, workshops and congresses in the field of Equine Diagnostic Imaging
- ♦ PhD in Veterinary from the Complutense University of Madrid
- ♦ Degree in Veterinary Medicine from the Complutense University of Madrid
- ♦ Large Animal Diagnostic Imaging Resident (ECVDI) at the Royal Veterinary College Equine Practice and Referral Hospital
- ♦ Certified by the European College of Veterinary Diagnostic Imaging (ECVDI) in the Specialty of Large Animals



Dr. Domínguez Gimbernat, Mónica

- ◆ Clinical equine veterinarian specializing in internal medicine and reproduction
- ◆ Clinical Veterinarian of the Reproduction Service of the Complutense Clinical Veterinary Hospital
- ◆ PhD in Veterinary Medicine, Complutense University of Madrid
- ◆ Official Master's Degree in Veterinary Science
- ◆ Spanish Certificate in Equine Clinic
- ◆ Associate Professor, Department of Animal Medicine and Surgery, Complutense University of Madrid
- ◆ Collaborating Professor in Practical Teaching, Department of Animal Medicine and Surgery, Complutense University of Madrid
- ◆ Teaching experience in Veterinary Technical Assistant (VTA) training in private academies and other courses in the Equine Reproduction Center COVECA

“ *An impressive teaching staff, made up of professionals from different areas of expertise, will be your teachers during your specialization: a unique opportunity not to be missed*”

04

Structure and Content

The contents have been developed by different experts, with a clear purpose: to ensure that our students acquire each and every one of the skills necessary to become true experts in this field. A complete and well-structured program that will take you to the highest standards of quality and success.





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A comprehensive teaching program, structured in well-developed teaching units, oriented towards learning that is compatible with your personal and professional life"

Module 1. Reproductive and Urinary System

- 1.1. Urinary System Assessment
 - 1.1.1. Hematological and Biochemical Parameters Related to the Renal System
 - 1.1.2. Urinalysis
 - 1.1.3. Diagnostic Methods in the Urinary System
 - 1.1.3.1. Ultrasound of the Urinary System
 - 1.1.3.2. Endoscopy of the Urinary System
 - 1.1.3.3. Renal Biopsy
 - 1.1.3.4. Water Deprivation Test
- 1.2. Urinary System Pathologies
 - 1.2.1. Acute Renal Failure
 - 1.2.1.1. Causes of Acute Renal Insufficiency
 - 1.2.1.2. Treatment of Acute Renal Insufficiency
 - 1.2.2. Chronic Renal Failure
 - 1.2.2.1. Causes of Chronic Renal Insufficiency
 - 1.2.2.2. Treatment of Chronic Renal Insufficiency
 - 1.2.3. Urinary Tract Infections
 - 1.2.3.1. Urethritis, Cystitis, Pyelonephritis and their Treatment
 - 1.2.3.2. Treatment of Urinary Tract Infections
 - 1.2.4. Obstructive Pathology of the Urinary Tract
 - 1.2.4.1. Obstructive Pathology Types
 - 1.2.4.2. Treatment
 - 1.2.5. Polyuria and Polydipsia
 - 1.2.6. Urinary Incontinence and Bladder Dysfunction
 - 1.2.7. Urinary Tract Tumors
- 1.3. Medical Pathologies of the Male Genitalia
 - 1.3.1. Introduction to the Medical Pathology of the Stallion
 - 1.3.2. Testicular Pathology in the Stallion
 - 1.3.2.1. Handling and Treatment of the Cryptorchid Stallion
 - 1.3.2.2. Testicular Inflammatory Disorders
 - 1.3.2.3. Management of Testicular Degeneration in the Stallion
 - 1.3.2.4. Hydrocele Management
 - 1.3.2.5. Testicular Neoplasms in the Stallion
 - 1.3.2.6. Testicular Torsion in the Stallion
 - 1.3.3. Penile Pathologies
 - 1.3.3.1. Penile Trauma Management
 - 1.3.3.2. Penile Tumor Developments
 - 1.3.3.3. Paraphimosis
 - 1.3.3.4. Priapism
 - 1.3.4. Pathology of Adnexal Glands
 - 1.3.4.1. Ultrasound and Assessment of Adnexal Glands
 - 1.3.4.2. Vesiculitis, Management and Treatment
 - 1.3.4.3. Adnexal Gland Obstruction
 - 1.3.5. Ejaculate Alterations
 - 1.3.5.1. Seminal Assessment
 - 1.3.5.2. Factors Affecting Fertility
 - 1.3.5.3. Sub-fertile Semen Management
 - 1.3.5.3.1. Semen Centrifugation for Quality Improvement
 - 1.3.5.3.2. Seminal Plasma Substitution
 - 1.3.5.3.3. Semen Filtration to Improve Quality
 - 1.3.5.3.4. Low-Quality Semen Cooling Protocols
 - 1.3.6. Alterations in Stallion Behavior and Mating Management
 - 1.3.7. Advances in Assisted Reproduction in Stallions
 - 1.3.7.1. Seminal Freezing
 - 1.3.7.2. Epididymal Sperm Retrieval after Death or Castration
- 1.4. Male Field Surgical Procedures
 - 1.4.1. Castration
 - 1.4.1.1. Introduction and Considerations of Castration in Males
 - 1.4.1.1.1. Patient Selection
 - 1.4.1.2. Castration Surgical Techniques
 - 1.4.1.2.1. Open Castration
 - 1.4.1.2.2. Closed Castration
 - 1.4.1.2.3. Semi-Closed or Semi-Open Castration
 - 1.4.1.3. Variations in Surgical Technique
 - 1.4.1.3.1. Different Hemostasis Options
 - 1.4.1.3.2. Primary Skin Closure
 - 1.4.1.4. On-Station Castration Considerations
 - 1.4.1.4.1. Sedation

- 1.4.1.5. Considerations for Castration under General Anesthetic
- 1.4.1.6. Inguinal Cryptorchidism
 - 1.4.1.6.1. Presurgical Diagnosis
 - 1.4.1.6.2. Surgical Technique
- 1.4.2. Penile Amputation
 - 1.4.2.1. Indications
 - 1.4.2.2. Post-Surgical Procedure and Considerations
- 1.5. Medical and Surgical Pathologies of the Female Genitalia I
 - 1.5.1. Medical Pathologies I
 - 1.5.1.1. Ovarian Pathology
 - 1.5.1.1.1. Ovulation Disorders
 - 1.5.1.1.2. Ovarian Tumors
 - 1.5.1.2. Fallopian Tubes Disorders
 - 1.5.1.3. Medical Uterine Pathology
 - 1.5.1.3.1. Preparation and Procedure for Sample Collection
 - 1.5.1.3.1.1. Cytology
 - 1.5.1.3.1.2. Biopsy
 - 1.5.1.3.2. Types of Endometritis
 - 1.5.1.3.3. Management of the Mare with Uterine Fluid
 - 1.5.1.3.4. Management of Mares with Uterine Cysts
- 1.6. Medical and Surgical Genital Pathologies of the Mare II
 - 1.6.1. Medical Pathologies II
 - 1.6.1.1. Cervical Pathology
 - 1.6.1.1.1. Cervical Lacerations
 - 1.6.1.1.2. Cervical Adherences
 - 1.6.1.2. Medical Pathology of the Vagina
 - 1.6.1.3. Reproductive Management of the Geriatric Mare
 - 1.6.1.4. Update on Assisted Reproduction in the Mare
 - 1.6.2. Surgical Pathologies of the Mare
 - 1.6.2.1. Normal Vulvar Conformation of the Mare
 - 1.6.2.1.1. Vulvar Examination of the Mare
 - 1.6.2.1.2. Caslick Index
 - 1.6.2.2. Vulvoplasty
 - 1.6.2.2.1. Caslick Surgery Procedure
- 1.7. Pregnant Mare and Care at Foaling
 - 1.7.1. Mare Gestation
 - 1.7.1.1. Diagnosis of Pregnancy in the Mare
 - 1.7.1.2. Management of Early and Late Multiple Gestation New Techniques
 - 1.7.1.3. Embryo Sexing
 - 1.7.2. Complications During Gestation in the Mare
 - 1.7.2.1. Abortion
 - 1.7.2.1.1. Early Abortion
 - 1.7.2.1.2. Late Miscarriage
 - 1.7.2.2. Uterine Torsion
 - 1.7.2.3. Management and Treatment of Placentitis
 - 1.7.2.4. Management of Placental Abruption
 - 1.7.3. Nutritional Needs of the Pregnant Mare
 - 1.7.4. Ultrasound Evaluation of the Fetus
 - 1.7.4.1. Ultrasound Evaluation at Different Stages of Gestation
 - 1.7.4.2. Fetal Biometry
 - 1.7.5. Methods for Predicting Foaling in the Full-Term Mare
 - 1.7.6. Euthyroid Labor and Delivery
 - 1.7.6.1. Phases of Euthyroid Labor and Delivery
- 1.8. Complications of Childbirth and Postpartum Care
 - 1.8.1. Dystocic Labor and Delivery
 - 1.8.1.1. Material Necessary for the Resolution of Dystocia
 - 1.8.1.2. Types of Dystocia and Management of Different Fetal Presentations
 - 1.8.2. Peripartum Surgical Emergencies
 - 1.8.2.1. Fetotomy
 - 1.8.2.1.1. Fetotome
 - 1.8.2.1.2. Preparation of the Mare for the Procedure
 - 1.8.2.1.3. Fetotomy in the Field vs. In the Hospital
 - 1.8.2.2. Cesarean Section
 - 1.8.2.3. Hemorrhage of the Ankle Ligament
 - 1.8.2.4. Uterine Laceration
 - 1.8.2.5. Prepubic Tendon Rupture
 - 1.8.2.6. Rectovaginal Fistula

- 1.8.3. Postpartum Care
 - 1.8.3.1. Control of Uterine Involution and Establishment of the Postpartum Cycle
- 1.8.4. Postpartum Complications
 - 1.8.4.1. Placenta Retention
 - 1.8.4.2. 8.8.4.2 Vaginal Lacerations
 - 1.8.4.3. 8.8.4.3 Uterine Bleeding
 - 1.8.4.4. Uterine Prolapse
 - 1.8.4.5. Rectal Prolapse
 - 1.8.4.6. 8.8.4.6 Vulvar Hematoma
 - 1.8.4.7. Uterine Horn Invagination
- 1.9. Repair of Tears and Lacerations during Labor and Delivery
 - 1.9.1. Management of Vulvar Tears and Lacerations during Labor and Delivery
 - 1.9.2. Classification of Perineal Lacerations
 - 1.9.3. Reconstruction of the Perineal Body
 - 1.9.3.1. Surgical Preparation of the Mare
 - 1.9.3.2. Vaginal Vestibule Sphincter Insufficiency
 - 1.9.3.2.1. Perineal Body Reconstruction, Vestibuloplasty
 - 1.9.3.2.2. Perineal Body Transverse Section, Perineoplasty
 - 1.9.3.2.2.1. Pouret's Surgery
 - 1.9.3.3. Postoperative Care
 - 1.9.3.4. Complications of Perineal Surgery
 - 1.9.4. Surgical Management of Third-Degree Rectovaginal Tearing
 - 1.9.5. Surgical Management of Rectovaginal Fistulas
- 1.10. Infectious and Parasitic Diseases of the Reproductive System in Equines
 - 1.10.1. Introduction to Infectious and Parasitic Diseases of the Reproductive System in Equines
 - 1.10.2. Economic and Productive Significance of Infectious and Parasitic Diseases
 - 1.10.3. Infectious Diseases of the Reproductive Tract
 - 1.10.3.1. Mycoplasmas
 - 1.10.3.2. Contagious Equine Metritis Procedure of Sample Collection for the Determination of Contagious Equine Metritis

- 1.10.3.3. Equine Viral Arteritis
- 1.10.3.4. Equine Rhinopneumonitis
- 1.10.3.5. Leptospirosis
- 1.10.3.6. Brucellosis
- 1.10.4. Parasitic Diseases of the Reproductive Tract
 - 1.10.4.1. Habronemiasis
 - 1.10.4.2. Durina

Module 2. Foal Medicine and Surgery

- 2.1. Neonatal Screening
 - 2.1.1. Normal Clinical Parameters in the Foal during the First Days of Life
 - 2.1.2. Beginning of the Functioning of Organ Systems at Birth and During the First Months of Life
 - 2.1.2.1. 9.1.2.1 Gastric System
 - 2.1.2.2. Respiratory System
 - 2.1.2.3. Endocrine System
 - 2.1.2.4. Muscular and Neurological System
 - 2.1.2.5. 9.1.2.5 Ophthalmic System
- 2.2. Immature Foal. Failure in the Passive Transfer of Immunity. Isoerythrolysis. Septicemia
 - 2.2.1. The Premature, Immature and Stunted Foal
 - 2.2.2. Cardiopulmonary Resuscitation
 - 2.2.3. Failure of Passive Transfer of Immunity
 - 2.2.4. Isoerythrolysis
 - 2.2.5. Neonatal Sepsis
- 2.3. Neonatal Respiratory, Cardiac, Neurological and Musculoskeletal Pathologies
 - 2.3.1. Neonatal Respiratory Pathologies
 - 2.3.1.1. Respiratory Bacterial Pathologies
 - 2.3.1.2. Viral Respiratory Pathologies
 - 2.3.1.3. Rib Fractures
 - 2.3.2. Neonatal Cardiac Pathologies
 - 2.3.2.1. Patent Ductus Arteriosus
 - 2.3.2.2. Foramen Ovale
 - 2.3.2.3. Tetralogy of Fallot

- 2.3.3. Neonatal Neurological Pathologies
 - 2.3.3.1. Hypoxic Ischemic Encephalopathy
 - 2.3.3.2. Septic Encephalitis, Meningitis and Metabolic Encephalopathies
 - 2.3.3.3. Congenital Neurological Pathologies
- 2.3.4. Neonatal Musculoskeletal Pathologies
 - 2.3.4.1. Vitamin E and Selenium Deficiency
- 2.4. Neonatal Gastrointestinal, Genitourinary and Endocrine Pathologies
 - 2.4.1. Neonatal Gastrointestinal Pathologies
 - 2.4.1.1. Bacterial and Viral Diarrhea
 - 2.4.1.2. Meconium Impaction
 - 2.4.1.3. Congenital Gastrointestinal Pathologies
 - 2.4.1.4. Gastric and Duodenal Ulcers
 - 2.4.2. Neonatal Genitourinary Pathologies
 - 2.4.2.1. Omphalophlebitis and Omphaloarteritis
 - 2.4.2.2. Patent Urachus
 - 2.4.2.3. Bladder Rupture
 - 2.4.3. Neonatal Endocrine Pathologies
 - 2.4.3.1. Thyroid Alterations
 - 2.4.3.2. Hypoglycemia, Hyperglycemia and Lack of Maturation of the Endocrine System
- 2.5. Identification and Stabilization of the Patient with Ruptured Bladder or Persistent Urachus
 - 2.5.1. Omphalophlebitis, Omphaloarteritis and Patent Urachus
 - 2.5.2. Bladder Rupture
 - 2.5.3. Diagnostic Assessment and Stabilization Treatments
 - 2.5.4. Medical Treatment and Surgical Options
- 2.6. Diagnostic Imaging of the Chest and Abdominal Cavity of the Foal
 - 2.6.1. Diagnostic Imaging the Chest
 - 2.6.1.1. Technical Basis
 - 2.6.1.1.1. Radiology
 - 2.6.1.1.2. Ultrasound
 - 2.6.1.1.3. Computerized Tomography
 - 2.6.1.2. Thoracic Pathology
 - 2.6.2. Diagnostic Imaging of the Abdomen
 - 2.6.2.1. Technical Basis
 - 2.6.2.1.1. Radiology
 - 2.6.2.1.2. Ultrasound
 - 2.6.2.2. Abdominal Pathology
- 2.7. Treatment of Septic Arthritis Umbilical Herniorrhaphy
 - 2.7.1. Pathophysiology and Diagnosis of Synovial Infections in Foals
 - 2.7.2. Treatment of Septic Arthritis in the Foal
 - 2.7.3. Etiopathogenesis and Diagnosis of Umbilical Hernias
 - 2.7.4. Umbilical Herniorrhaphy: Surgical Techniques
- 2.8. Angular Deformities Treatment
 - 2.8.1. Etiopathogenesis
 - 2.8.2. Diagnosis
 - 2.8.3. Conservative Treatment
 - 2.8.4. Surgical Management
- 2.9. Flexural Deformities Treatment
 - 2.9.1. Etiopathogenesis
 - 2.9.2. Diagnosis
 - 2.9.3. Conservative Treatment
 - 2.9.4. Surgical Management
- 2.10. Diagnosis of Developmental Diseases in the Foal. Treatment of Phytitis, Epiphysitis and Hoof Management Guidelines for Healthy Foals
 - 2.10.1. Etiopathogenesis, Diagnosis and Treatment of different forms of Phytitis, Epiphysitis, Osteochondrosis and Subchondral Cysts
 - 2.10.2. Evaluation of Poise in the Healthy Foal
 - 2.10.3. Hoof Trimming Guideline in the Healthy Foal

05

Study Methodology

TECH is the world's first university to combine the **case study** methodology with **Relearning**, a 100% online learning system based on guided repetition.

This disruptive pedagogical strategy has been conceived to offer professionals the opportunity to update their knowledge and develop their skills in an intensive and rigorous way. A learning model that places students at the center of the educational process giving them the leading role, adapting to their needs and leaving aside more conventional methodologies.



“

TECH will prepare you to face new challenges in uncertain environments and achieve success in your career”

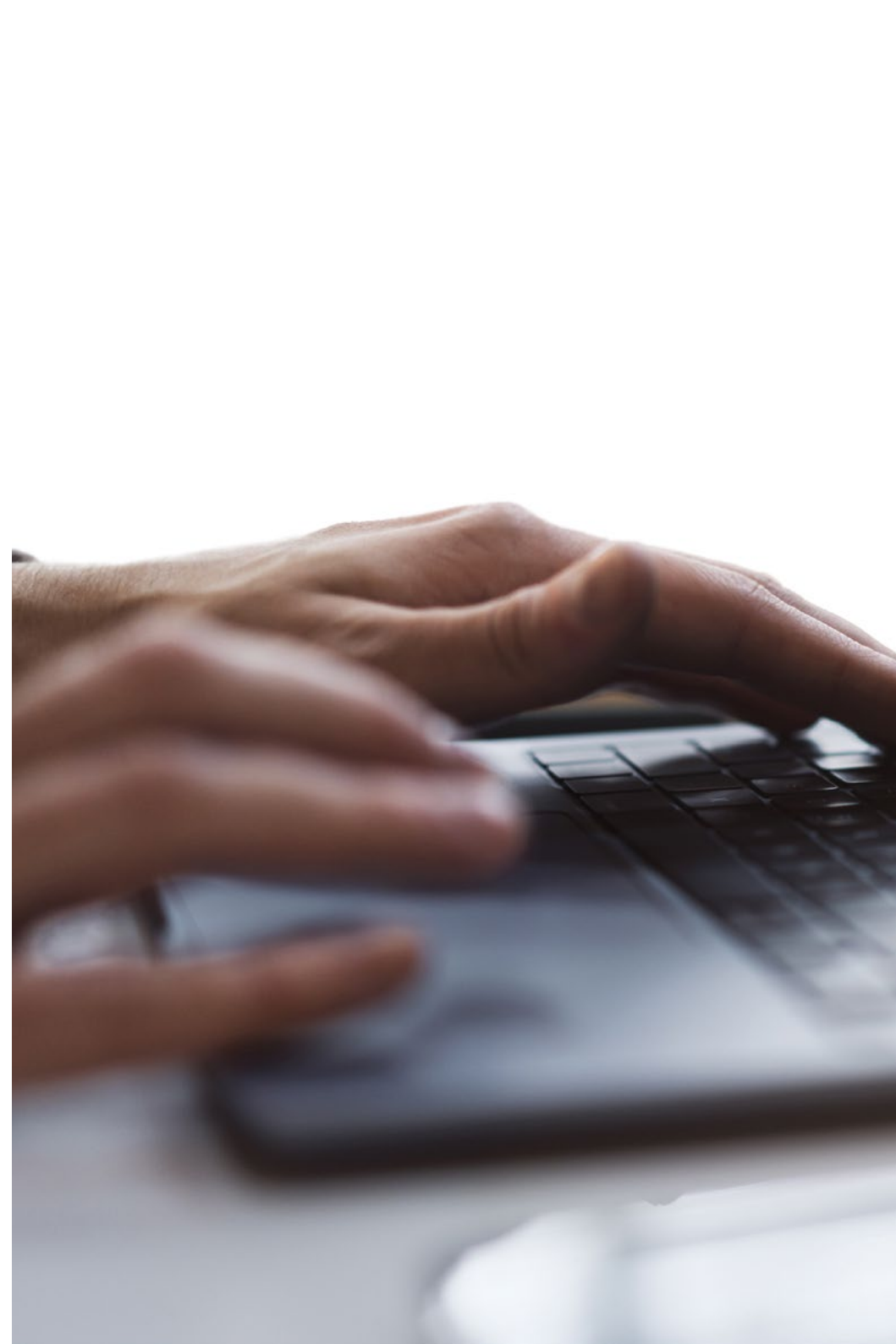
The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist. The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

With TECH's asynchronous educational model, it is students who choose the time they dedicate to study, how they decide to establish their routines, and all this from the comfort of the electronic device of their choice. The student will not have to participate in live classes, which in many cases they will not be able to attend. The learning activities will be done when it is convenient for them. They can always decide when and from where they want to study.

“

*At TECH you will NOT have live classes
(which you might not be able to attend)”*



The most comprehensive study plans at the international level

TECH is distinguished by offering the most complete academic itineraries on the university scene. This comprehensiveness is achieved through the creation of syllabi that not only cover the essential knowledge, but also the most recent innovations in each area.

By being constantly up to date, these programs allow students to keep up with market changes and acquire the skills most valued by employers. In this way, those who complete their studies at TECH receive a comprehensive education that provides them with a notable competitive advantage to further their careers.

And what's more, they will be able to do so from any device, pc, tablet or smartphone.

“

TECH's model is asynchronous, so it allows you to study with your pc, tablet or your smartphone wherever you want, whenever you want and for as long as you want”

Case Studies and Case Method

The case method has been the learning system most used by the world's best business schools. Developed in 1912 so that law students would not only learn the law based on theoretical content, its function was also to present them with real complex situations. In this way, they could make informed decisions and value judgments about how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

With this teaching model, it is students themselves who build their professional competence through strategies such as Learning by Doing or Design Thinking, used by other renowned institutions such as Yale or Stanford.

This action-oriented method will be applied throughout the entire academic itinerary that the student undertakes with TECH. Students will be confronted with multiple real-life situations and will have to integrate knowledge, research, discuss and defend their ideas and decisions. All this with the premise of answering the question of how they would act when facing specific events of complexity in their daily work.



Relearning Methodology

At TECH, case studies are enhanced with the best 100% online teaching method: Relearning.

This method breaks with traditional teaching techniques to put the student at the center of the equation, providing the best content in different formats. In this way, it manages to review and reiterate the key concepts of each subject and learn to apply them in a real context.

In the same line, and according to multiple scientific researches, reiteration is the best way to learn. For this reason, TECH offers between 8 and 16 repetitions of each key concept within the same lesson, presented in a different way, with the objective of ensuring that the knowledge is completely consolidated during the study process.

Relearning will allow you to learn with less effort and better performance, involving you more in your specialization, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation to success.



A 100% online Virtual Campus with the best teaching resources

In order to apply its methodology effectively, TECH focuses on providing graduates with teaching materials in different formats: texts, interactive videos, illustrations and knowledge maps, among others. All of them are designed by qualified teachers who focus their work on combining real cases with the resolution of complex situations through simulation, the study of contexts applied to each professional career and learning based on repetition, through audios, presentations, animations, images, etc.

The latest scientific evidence in the field of Neuroscience points to the importance of taking into account the place and context where the content is accessed before starting a new learning process. Being able to adjust these variables in a personalized way helps people to remember and store knowledge in the hippocampus to retain it in the long term. This is a model called Neurocognitive context-dependent e-learning that is consciously applied in this university qualification.

In order to facilitate tutor-student contact as much as possible, you will have a wide range of communication possibilities, both in real time and delayed (internal messaging, telephone answering service, email contact with the technical secretary, chat and videoconferences).

Likewise, this very complete Virtual Campus will allow TECH students to organize their study schedules according to their personal availability or work obligations. In this way, they will have global control of the academic content and teaching tools, based on their fast-paced professional update.



The online study mode of this program will allow you to organize your time and learning pace, adapting it to your schedule”

The effectiveness of the method is justified by four fundamental achievements:

1. Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that assess real situations and the application of knowledge.
2. Learning is solidly translated into practical skills that allow the student to better integrate into the real world.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.

The university methodology top-rated by its students

The results of this innovative teaching model can be seen in the overall satisfaction levels of TECH graduates.

The students' assessment of the quality of teaching, quality of materials, course structure and objectives is excellent. Not surprisingly, the institution became the best rated university by its students on the Trustpilot review platform, obtaining a 4.9 out of 5.

Access the study contents from any device with an Internet connection (computer, tablet, smartphone) thanks to the fact that TECH is at the forefront of technology and teaching.

You will be able to learn with the advantages that come with having access to simulated learning environments and the learning by observation approach, that is, Learning from an expert.



As such, the best educational materials, thoroughly prepared, will be available in this program:



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.

This content is then adapted in an audiovisual format that will create our way of working online, with the latest techniques that allow us to offer you high quality in all of the material that we provide you with.



Practicing Skills and Abilities

You 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 within the framework of the globalization we live in.



Interactive Summaries

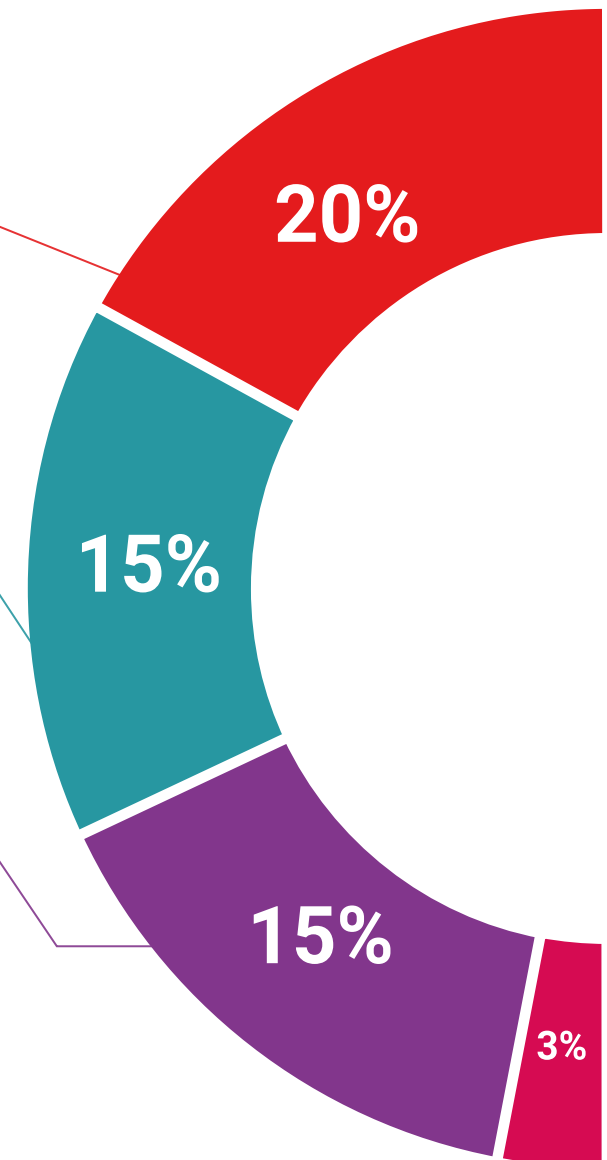
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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



Additional Reading

Recent articles, consensus documents, international guides... In our virtual library you will have access to everything you need to complete your education.





Case Studies

Students will complete a selection of the best case studies in the field. Cases that are presented, analyzed, and supervised by the best specialists in the world.



Testing & Retesting

We periodically assess and re-assess your knowledge throughout the program. We do this on 3 of the 4 levels of Miller's Pyramid.



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 for future difficult decisions.



Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical and effective way to help students progress in their learning.



06

Certificate

The Postgraduate Certificate in Equine Reproduction and Neonatology guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



“

*Successfully complete this program
and receive your university qualification
without having to travel or fill out
laborious paperwork”*

This private qualification will allow you to obtain a **Postgraduate Certificate in Nombre del Programa** 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.

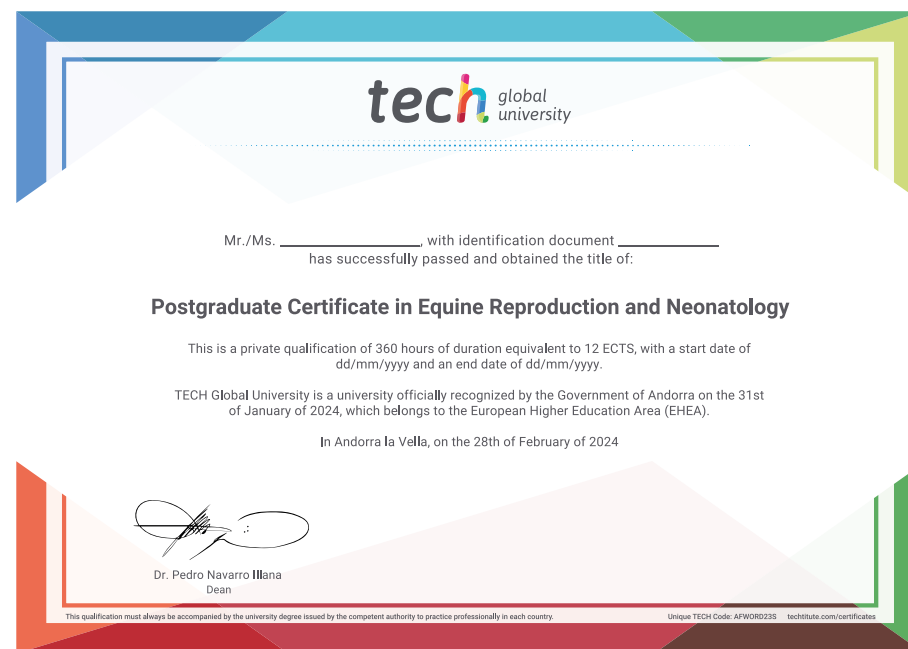
This **TECH Global University** private qualification is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Equine Reproduction and Neonatology**

Modality: **online**

Duration: **12 weeks**

Accreditation: **12 ECTS**





Postgraduate Certificate
Equine Reproduction and
Neonatology

- » Modality: **online**
- » Duration: **12 weeks**
- » Certificate: **TECH Global University**
- » Accreditation: **12 ECTS**
- » Schedule: **at your own pace**
- » Exams: **online**

Postgraduate Certificate

Equine Reproduction and Neonatology

