



# Master's Degree

# Natural Childbirth

» Modality: online

» Duration: 12 months

» Certificate: TECH Global University

» Credits: 60 ECTS

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/medicine/master-degree/master-natural-childbirth

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# tech 06 | Introduction

Childbirth is a crucial moment in a woman's and her baby's life, so it has significant implications for their long-term health and well-being. In this sense, Natural Childbirth allows giving birth without the assistance of medical interventions such as Epidural Anesthesia, synthetic Oxytocin, or Cesarean section. In fact, this type of childbirth is considered beneficial for both the mother and the newborn in many aspects, as it can reduce the risk of complications, shorten the recovery time, and promote breastfeeding. Furthermore, it can enhance the birthing experience, giving women more control over their bodies and greater participation in the birthing process.

Therefore, there is an increasing demand for doctors who are fully up-to-date on Natural Childbirth, and with this Master's Degree, health professionals will have a perfect opportunity for updating their knowledge. In fact, students will delve into how, by following the guidelines and principles that have guided human birth for millennia, it is possible to achieve much healthier childbirth and delivery. To do so, they will cover a comprehensive range of topics, including emergency situations during childbirth and for newborns, scientific and neuroscientific evidence in this field, and the fundamentals of home births and water births.

This Master's Degree will update the clinical internship of the specialist doctor based on the most current scientific evidence, and it will provide all the resources needed to excel in this increasingly important area. In this regard, the educational materials will be hosted on the Virtual Campus, available 24 hours a day for consultation. Moreover, they have been designed by the leading experts in Natural Childbirth that graduates can find in the academic market.

This **Master's Degree in Natural Childbirth** contains the most complete and up-to-date scientific program on the market. The most important features include:

- The development of practical cases presented by experts in Natural Childbirth
- 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
- Its special emphasis on innovative methodologies
- 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



Gain a deep understanding of childbirth as a perfectly and harmoniously designed process by nature. Enroll now!"



Seize the opportunity to enroll in a program that involves the participation of women sharing their experiences about Natural Childhirth"

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

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

This program is designed around Problem-Based Learning, whereby the professional must try to solve the different professional practice situations that arise during the academic year This will be done with the help of an innovative system of interactive videos made by renowned experts.

Position yourself as a specialist doctor known for water birth through its study using explanatory videos or interactive diagrams.

Test your skills through dynamic practical cases in which you will have to respond to possible complications in Natural Childbirth.







# tech 10 | Objectives



# **General Objectives**

- Acquire fundamental knowledge about the physiology of Natural Childbirth, ancient cultural practices, and the emotional needs of women during childbirth, as well as the implications of medical interventions
- Acquire essential skills and knowledge for the care of pregnant women and their fetuses, including promoting healthy pregnancies and identifying potential complications
- Acquire fundamental knowledge and skills in the diagnosis, management, and prevention of childbirth emergencies, with a focus on interprofessional collaboration and patient rights advocacy
- Acquire fundamental knowledge and skills in the assessment, diagnosis, and management of neonatal emergencies, with an emphasis on early problem recognition and the application of appropriate interventions
- Emphasize fundamental knowledge about the neuroscience of pregnancy, motherhood, and perinatal care, as well as the scientific evidence related to Natural Childbirth and evidence-based care practices
- Acquire fundamental knowledge about home births, including team management and organization, pregnancy, childbirth, and postpartum preparation and support, as well as the identification and management of special situations and home obstetric emergencies
- Acquire fundamental knowledge about Natural Childbirth units, such as birthing centers
  and hospital units, and develop skills to assess, plan, and manage these environments,
  ensuring a high level of care and satisfaction for women and their families

- Acquire fundamental knowledge and practical skills in newborn care, as well as
  the ability to provide comprehensive and safe care in this critical stage of life and
  collaborate with other health professionals and families to ensure the well-being
  of the newborn
- Acquire knowledge about the physical and emotional needs of the mother during the perinatal period
- Develop skills to provide emotional support and comprehensive care to the mother during the postpartum period, including difficult and emotionally intense situations
- Promote the prevention and care of maternal mental health during the perinatal period, including the detection and treatment of mood disorders and addressing obstetric trauma and obstetric violence
- Analyze the stages of labor and pain management and relaxation techniques
- Develop skills in creating and monitoring personalized birth plans
- Examine the importance of interdisciplinary collaboration in childbirth care
- Promote emotional preparation and support for women and their families during the childbirth process
- \* Acquire skills to identify and manage high-risk situations in pregnancy and childbirth





# **Specific Objectives**

### Module 1. Natural Childbirth

- Analyze the science and evolution of Natural Childbirth, and how current medical practices compare to historical and global statistics
- Examine the physiology of normal childbirth in the human species, including the hormonal cocktail, positions, and female sexuality
- Analyze childbirth practices in ancestral cultures and their relevance in the present
- Identify and address the emotional needs of women during childbirth and how professionals can support them
- Thoroughly analyze the role of Oxytocin in Natural Childbirth and the differences between endogenous and exogenous Oxytocin
- Examine current pandemics related to childbirth and their impact on the health of women and newborns
- Delve into the needs of the newborn during and after childbirth, including intestinal and epidermal flora, the umbilical cord, and placental blood
- Analyze the intervention in childbirth and how it affects the environment and safety, as well as the importance of respecting the nature of the process

# tech 12 | Objectives

### Module 2. Delivery Emergencies

- Identify signs and symptoms of ruptured membranes, diagnose and manage their impact on labor and postpartum
- Thoroughly analyze the reasons, methods, risks, and benefits of induced labor, as well as its monitoring and follow-up
- Examine in-depth the causes, risk factors, effects, and interventions in prolonged labor, and how to prevent and plan for such cases
- Identify risk factors, recognize and diagnose shoulder dystocia, apply resolution maneuvers and techniques, and manage their complications and follow-up
- Thoroughly analyze indications, types of instruments, procedures, and techniques in instrumental delivery, as well as their risks, benefits, and considerations
- Identify indications and types of cesarean sections, analyze the process and recovery, and address risks, benefits, and the planning of elective cesareans
- Evaluate and monitor complicated deliveries, apply interventions, manage pain, work as a team, and provide emotional and psychological support
- Understand the patient in complicated deliveries, including the right to information, consent, privacy, decision-making, and dignified treatment
- Develop effective communication skills in complicated deliveries, including active listening, empathy, clear and assertive communication, conflict management, and negotiation
- Delve into the process of informed consent and shared decision-making in complicated deliveries, including documentation and consent recording

### Module 3. Newborn Emergencies

- Perform an initial assessment of the newborn, including the Apgar score assessment and the identification of risk factors
- Analyze basic and advanced Neonatal Resuscitation techniques, such as bag-mask ventilation, chest compressions, endotracheal intubation, and medication administration
- Deepen knowledge about common respiratory conditions in newborns, such as Transient Tachypnea, Respiratory Distress Syndrome, and Meconium Aspiration
- Identify Neonatal Hypoglycemia, including capillary blood glucose measurement and long-term follow-up
- Evaluate neonatal jaundice, applying treatments like phototherapy and exchange transfusion
- Recognize neonatal infections, including sepsis and meningitis, and apply prophylactic and preventive measures
- Examine cardiovascular emergencies in the newborn, such as neonatal shock, congestive heart failure, and patent ductus arteriosus
- Manage the care of premature newborns, focusing on initial stabilization, nutrition, and prevention of long-term complications
- Develop knowledge in preparation and teamwork, effective communication among professionals, and follow-up and referral to specialized services in neonatal emergencies

#### Module 4. Scientific and Neuroscientific Evidence

- Analyze brain plasticity during Motherhood and the importance of research in animals and humans in this field
- Examine brain changes in rodents and humans during pregnancy and postpartum and the involvement of hormones in Motherhood
- Examine the Neurobiology of Breastfeeding and how empathy and altruism influence baby care
- Navigate neuroscientific research to psychosocial interventions and emotional and cognitive support for future mothers and fathers
- Analyze the scientific evidence in Natural Childbirth and evidence-based care practices
- Examine the use of non-invasive technology and analgesia and anesthesia in Natural Childbirth
- Identify the benefits and risks of Natural Childbirth and adapting care according to the context, including hospital and home settings

#### Module 5. Home Birth

- Thoroughly analyze the scientific evidence, history, and anthropology of home birth and delivery, considering the importance of preventing obstetric violence
- Analyze how to manage and organize the team, as well as select and use the necessary materials for home birth
- Analyze how to provide appropriate follow-up and support during pregnancy, including creating medical history and identifying difficulties and deviations from normality
- Examine assistance and support during labor at home, using non-pharmacological resources to alleviate pain and address deviations from normality

- Assist with birth, placenta detachment, and exit, and managing dystocia and other potential complications
- In-depth analysis of the physiology of water birth, examining the safety of this type of home birth
- Identify special situations, arranging hospital transfers, and managing obstetric emergencies in the home environment
- Examine appropriate follow-up and support during the postpartum period, both physically and emotionally, for both the mother and the baby
- Analyze mental health during the postpartum period, including breastfeeding, perinatal death, and post-traumatic stress
- Develop knowledge in research and examining strategies for pelvic floor care during and after childbirth

#### Module 6. Water Birth

- Thoroughly examining the global history and practices of water birth and understanding its physiological advantages and effects
- Analyze the physical and physiological fundamentals of water birth, including the Archimedes' principle and physiological changes during immersion
- Identify immersion criteria and common contraindications in water birth
- Analyzing the monitoring of conditions during water birth, including water temperature, infection control, and body mechanics
- Examine the second (expulsion) stage of water birth, protecting the perineum land addressing potential complications
- Evaluate neonatal physiology and the newborn in the context of water birth

# tech 14 | Objectives

- In-depth analysis of practices in the third physiological stage and postpartum care in water birth
- Facilitate the initiation of breastfeeding and postpartum follow-up in cases of water birth
- Identify and preventing specific complications in water birth and managing emergency situations
- Provide education, support, and resources for water birth to both women and their families and health professionals

#### Module 7. Natural Birth Units

- Thoroughly examine the definition and function of birth centers and differentiate them from hospitals
- Analyze the principles of design and architecture of birth centers to create comfortable and safe environments
- Identify the services offered by birth centers and hospital maternity units during prenatal, labor, and postnatal stages
- Promote and support birth centers and their importance in the care of low-risk pregnancies
- Compare the safety, comfort, and satisfaction of women in birth centers and hospital maternity units
- Examine the roles of professionals in birth centers and hospital units, as well as the necessary training to work in these settings
- Thoroughly examine the planning and management of birth centers, financing, and staff selection
- Explore trends and future perspectives in the development of birth centers and maternity units, considering technological innovations, policies, and models of care focused on women and families

#### Module 8. Newborn Needs

- Examine the importance of Natural Birth and the care of the newborn in this stage
- Acquire skills in the immediate assessment of the newborn, including vital signs measurement and establishing respiration
- Promote and facilitate the first skin-to-skin contact and early initiation of breastfeeding
- Conduct a physical examination of the newborn and detect warning signs
- Examine best practices in umbilical cord management
- Review the administration of screening tests and prevention, such as Vitamin K administration and initial immunization
- Provide advice on vaccines and support natural immunization
- Examine appropriate techniques for newborn skin care and hygiene
- Promote safe sleep practices and prevent Sudden Infant Death Syndrome (SIDS)
- Deepen proper medical follow-up and monitor the newborn's development

### Module 9. Mother's Needs

- Thoroughly examine immediate care and pelvic floor recovery
- Examine the causes and physiology of afterbirth pains (entuertos)
- Analyze pain management strategies and provide appropriate care
- Thoroughly examine the return of menstruation and the factors influencing its reappearance
- Deepen the relationship between menstruation and breastfeeding
- Identify contraceptive methods compatible with breastfeeding
- Identify the symptoms of postpartum depression, postpartum anxiety, and post-traumatic stress disorder
- Identify types and manifestations of obstetric violence



### Module 10. Delivery Preparation

- Convey to pregnant women the ability to understand changes in the maternal body and fetal development
- Thoroughly examine different techniques in the stages of labor
- Deepen prenatal exercises and physical preparation
- Identify nutrition needs during pregnancy
- Deepen preferences in creating a birth plan
- Deepen emotional preparation for childbirth
- Deepen family involvement in education and childbirth preparation



Are you going to miss the opportunity to analyze the stages of labor and pain management and relaxation techniques?"





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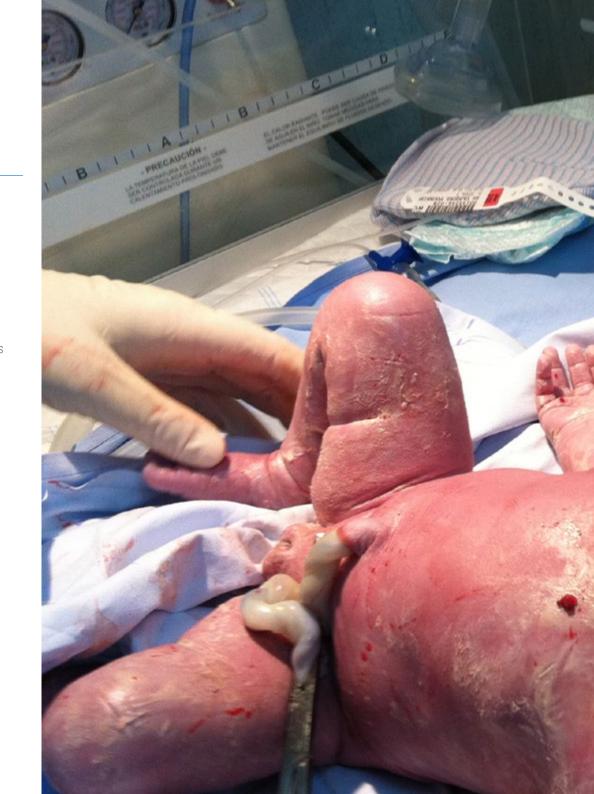


# **General Skills**

- Master ancestral cultural practices and the emotional needs of women during labor
- Provide comprehensive support to women in Natural Birth
- Offer comprehensive support to women in the postpartum period, including difficult and intense situations
- Act quickly and effectively in high-risk pregnancy and childbirth situations
- Provide emotional support to women and their families during the Natural Birth process
- Develop personalized birth plans and monitor them



Expand your competencies in medical management of Natural Birth, including advanced strategies to protect the mother's mental health"







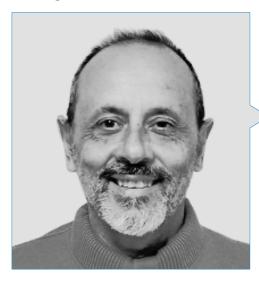
# Specific Skills

- Address the emotional needs of women during labor and how professionals can support them
- Monitor complicated births, apply interventions, and manage pain
- Apply the process of informed consent and shared decision-making in complicated childbirth
- Address cardiovascular emergencies in the newborn
- Develop advanced skills in preparation and teamwork, effective communication among professionals, and follow-up and referral to specialized services in neonatal emergencies
- Assist and support the dilation at home, using non-pharmacological resources to alleviate pain and address deviations from normalcy
- Provide appropriate follow-up and support during the postpartum period for both mother and child, both physically and emotionally
- Address mental health during the postpartum period, including breastfeeding, perinatal death, and post-traumatic stress
- Manage the second stage (expulsion) of water birth, protecting the perineum and addressing potential complications
- Conduct a physical examination of the newborn and detect warning signs
- Assist the pregnant woman in identifying the hormonal processes during pregnancy and recognizing the signs of preparation for labor



# tech 22 | Course Management

# Management



# Dr. Santos Leal, Emilio

- Medical specialist in University Hospital Fundación Alcorcón
- Medical specialist in Consorcio Hospital General Universitario de Valencia
- Medical specialist at Pius Hospital de Valls
- Medical specialist at Clínica Perpetuo Socorro
- Specialty in Gynecology and Obstetrics at San Carlos Clinical Hospital
- Degree in Medicine and Surgery from the University of Cantabria



### **Professors**

### Dr. Espinosa Barrajón, José Ángel

- Director of the Affective Childbirth Unit at the Hospital San Francisco de Asís
- Head of the Obstetrics and General Gynecology Team at Hospital San Francisco de Asís
- Specialist in Gynecology and Obstetrics at Clínica de la Concepción
- Master's Degree in Minimally Invasive Surgery in Gynecology from the Universidad Cardenal Herrera
- Degree in Medicine and Surgery from the Universidad Autónoma de Madrid

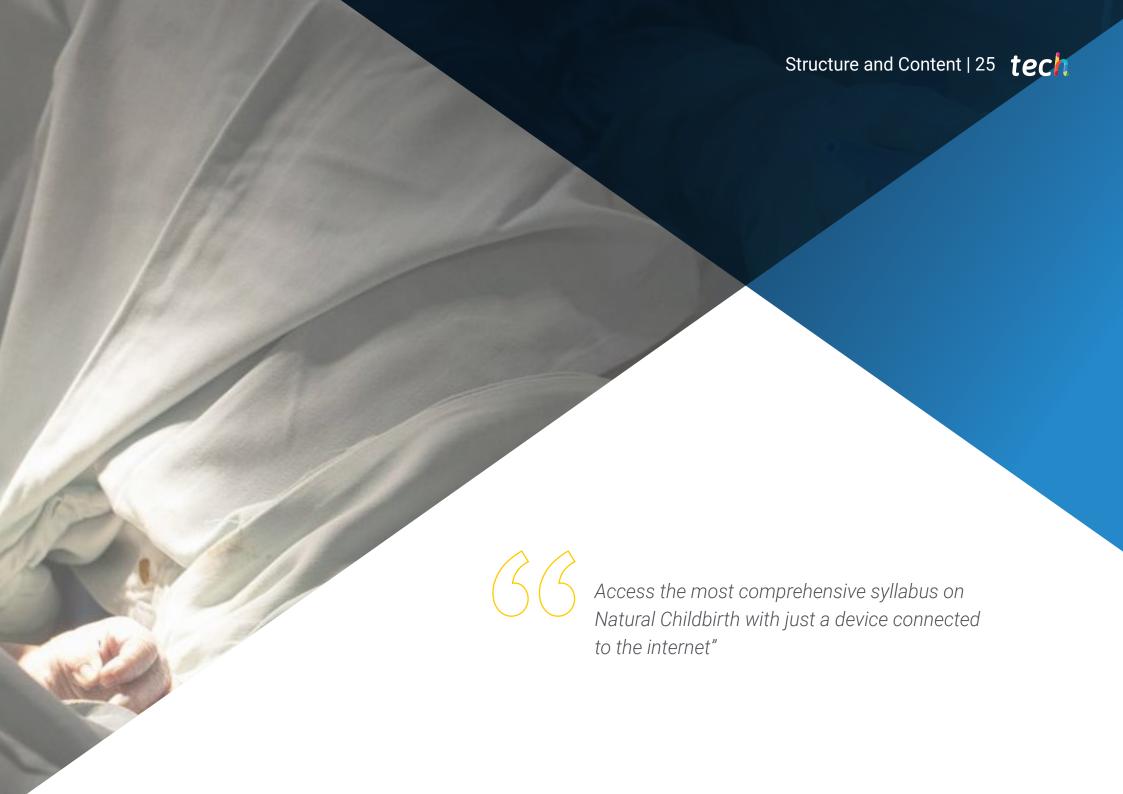
### Ms. García García, María Dolores

- Midwife in Specialized Care at the Hospital General Universitario de Valencia
- Master's Degree in Business Management from the Universidad Católica San Antonio de Murcia
- Master's Degree in Bioethics from the Universidad Católica San Antonio de Murcia
- Expert in Breastfeeding Advice and Consultancy, Universidad Católica de Ávila
- Degree in Nursing, specializing in Midwifery

### Ms. Lanza del Rivero, Cristina

- Field Psychologist at Casa de la Salud
- Postgraduate in Theory and Practice of Psychodrama, Sociodrama and Sociometry at the Universidad de Salamanca
- Postgraduate in Theory and Practice of Group Analysis at the Universidad de Salamanca
- Master's Degree in Behavior Modification from the Universidad de Salamanca
- Degree in Psychology from the Universidad de Salamanca





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### Module 1. Natural Childbirth

- 1.1. Natural Childbirth
  - 1.1.1. Science versus dogma
  - 1.1.2. Evolution as a species
  - 1.1.3. Worldwide statistics: oxytocin, analgesia, episiotomies, cesarean sections
  - 1.1.4. Improving the statistics
- 1.2. Normal childbirth in the human species
  - 1.2.1. Hormonal cocktail in normal childbirth
  - 1.2.2. Positions in normal childbirth
  - 1.2.3. Female sexuality
  - 1.2.4. Physiology of the sexual act
- 1.3. Childbirth in ancestral cultures
  - 1.3.1. Childbirth among the Taínos, Guanajatabeyes, and Siboneyes
  - 1.3.2. Childbirth before the Sumerians
  - 1.3.3. Orgasmic childbirth
  - 1.3.4. Michel Odent
- 1.4. Emotional needs of laboring women
  - 1.4.1. Empowerment
  - 1.4.2. Intimacy
  - 1.4.3. Dedication
  - 1.4.4. Majesty
- 1.5. Needs of the professional attending laboring women
  - 1.5.1. Secrecy
  - 1.5.2. Professional attitude towards pain
  - 1.5.3. Respect for the majesty of the moment
  - 1.5.4. Privilege

- 1.6. The Why of Emotional Needs
  - 1.6.1. Comfort
  - 1.6.2. Intimacy
  - 1.6.3. Connection with the most primal
  - 1.6.4. Connection with the most spiritual
- 1.7. Oxytocin
  - 1.7.1. The hemato-placental barrier
  - 1.7.2. The blood-brain barrier
  - 1.7.3. Endogenous oxytocin
  - 1.7.4. Exogenous oxytocin
- 1.8. Current pandemics
  - 1.8.1. The cesarean pandemic
  - 1.8.2. The immunological disorders pandemic
  - 1.8.3. The autism pandemic
  - 1.8.4. The hyperactivity and attention deficit pandemic
- 1.9. Newborn Needs
  - 1.9.1. Intestinal flora
  - 1.9.2. Skin flora
  - 1.9.3. The Umbilical Cord
  - 1.9.4. Placental blood
- 1.10. Interventionism
  - 1.10.1. Amending nature
  - 1.10.2. Intervening calls for intervention
  - 1.10.3. The chain of interventionism
  - 1.10.4. Environment and safety in childbirth





## Module 2. Emergencies in Natural Childbirth

- 2.1. Ruptured membrane
  - 2.1.1. Signs and Symptoms
  - 2.1.2. Risk Factors
  - 2.1.3. Diagnosis and Management
  - 2.1.4. Impact on childbirth and postpartum
- 2.2. Induced labor
  - 2.2.1. Reasons for Induction
  - 2.2.2. Induction methods
  - 2.2.3. Risks and Benefits
  - 2.2.4. Monitoring and follow-up
- 2.3. Extended Labor
  - 2.3.1. Causes and Risk Factors
  - 2.3.2. Effects on the Mother and the Baby
  - 2.3.3. Interventions and Management
  - 2.3.4. Prevention and Planning
- 2.4. Shoulder Dystocia
  - 2.4.1. Risk Factors and Prevention
  - 2.4.2. Recognition and Diagnosis
  - 2.4.3. Resolution Maneuvers and Techniques
  - 2.4.4. Complications and Follow-up
- 2.5. Instrumental Delivery
  - 2.5.1. Indications and Types of Instruments
  - 2.5.2. Procedures and Techniques
  - 2.5.3. Risks and Benefits
  - 2.5.4. Ethical Considerations
- 2.6. Cesarean Section
  - 2.6.1. Indications and Types of Cesarean Sections
  - 2.6.2. Process and Recovery
  - 2.6.3. Risks and Benefits
  - 2.6.4. Elective Cesareans and Planning

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2.7.	Managem	ent of	Comp	licated	Childbirth

- 2.7.1. Assessment and Monitoring
- 2.7.2. Interventions and Pain Management
- 2.7.3. Teamwork and Staff Roles
- 2.7.4. Emotional and Psychological Support
- 2.8. Patient in Complicated Childbirth
  - 2.8.1. Information and Consent
  - 2.8.2. Privacy and Confidentiality
  - 2.8.3. Decision-Making and Participation
  - 2.8.4. Respect and Dignified Treatment
- 2.9. Effective Communication in Complicated Childbirth
  - 2.9.1. Active Listening and Empathy
  - 2.9.2. Clear and Assertive Communication
  - 2.9.3. Conflict Management and Negotiation
  - 2.9.4. Communication Tools for Professionals and Patients
- 2.10. Informed Consent and Decision-Making in Complicated Childbirth
  - 2.10.1. Adequate and Understandable Information
  - 2.10.2. Risks, Benefits, and Alternatives
  - 2.10.3. Shared Decision-Making Process
  - 2.10.4. Documentation and Record of Consent

### Module 3. Newborn Emergencies

- 3.1. Initial Assessment of the Newborn
  - 3.1.1. Apgar Score Assessment
  - 3.1.2. Vital Signs and Physical Examination
  - 3.1.3. Identification of Risk Factors
  - 3.1.4. Immediate Stabilization
- 3.2. Basic Neonatal Resuscitation
  - 3.2.1. Positioning and Airway Patency
  - 3.2.2. Bag-Mask Ventilation
  - 3.2.3. Cardiac Massage
  - 3.2.4. Monitoring and Adjustment of Resuscitation
- 3.3. Advanced Neonatal Resuscitation
  - 3.3.1. Endotracheal Intubation
  - 3.3.2. Medication administration
  - 3.3.3. Umbilical Vascular Access
  - 3.3.4. Defibrillation and Advanced Techniques
- 3.4. Respiratory Difficulties in the Newborn
  - 3.4.1. Transient Tachypnea of the Newborn
  - 3.4.2. Respiratory Distress Syndrome
  - 3.4.3. Meconium Aspiration
  - 3.4.4. Persistent Pulmonary Hypertension
- 3.5. Neonatal Hypoglycemia
  - 3.5.1. Risk Factors and Symptoms
  - 3.5.2. Capillary Glucose Measurement
  - 3.5.3. Treatment and Prevention
  - 3.5.4. Long-Term Monitoring and Control

# Structure and Content | 29 tech

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- 3.6.1. Etiology and Pathophysiology
- 3.6.2. Clinical Evaluation and Diagnosis
- 3.6.3. Treatment: Phototherapy and Exchange Transfusion
- 3.6.4. Prevention and Follow-up
- 3.7. Neonatal Infections
  - 3.7.1. Early and Late-Onset Sepsis
  - 3.7.2. Neonatal Meningitis
  - 3.7.3. Antibiotic Prophylaxis and Treatment
  - 3.7.4. Immunization and Infection Prevention
- 3.8. Cardiovascular Emergencies in the Newborn
  - 3.8.1. Neonatal Shock
  - 3.8.2. Congestive Heart Failure
  - 3.8.3. Persistent Ductus Arteriosus
- 3.9. Management of Premature Newborns
  - 3.9.1. Initial Stabilization and Respiratory Care
  - 3.9.2. Nutrition and Growth
  - 3.9.3. Prevention of Long-Term Complications
- 3.10. Protocols and Organization in Neonatal Emergency Care
  - 3.10.1. Preparation and Teamwork
  - 3.10.2. Effective Communication Among Professionals
  - 3.10.3. Follow-Up and Referral to Specialized Services

### Module 4. Scientific and Neuroscientific Evidence

- 4.1. Neuroscience of Pregnancy and Maternity
  - 4.1.1. Brain Plasticity During the Transition to Motherhood
  - 4.1.2. Comparison of Studies in Animals and Humans
  - 4.1.3. Evolution and Biological Mechanisms of Maternal Care
  - 4.1.4. Hormones and Their Role in Motherhood
- 4.2. Animal Models in Maternity Research
  - 4.2.1. Brain Changes in Animals During Pregnancy and Offspring Care
  - 4.2.2. Hormones and Regulation of Maternal Behavior in Animals
  - 4.2.3. Applications of Animal Findings to Human Research
- 4.3. Brain Changes in Human During Pregnancy and Postpartum
  - 4.3.1. Brain Reorganization During Pregnancy
  - 4.3.2. Limbic System and Mother-Child Connection
  - 4.3.3. Social Cognition, Empathy, and Maternal Adaptations
- 4.4. Clinical Implications and Practical Applications
  - 4.4.1. Impact of Breastfeeding and Care on Caregiver's Brain
  - 4.4.2. Neurobiology of Breastfeeding
  - 1.4.3. Clinical Approach to Behavioral Changes in Motherhood
- 4.5. Oxytocin and Its Role in Bonding
  - 4.5.1. Oxytocin in Humans
  - 4.5.2. Oxytocin in baby
  - 4.5.3. Oxytocin in Maternal Care
- 4.6. Scientific Evidence in Pregnancy Monitoring
  - 4.6.1 Pregnancy Nutrition
  - 4.6.2 Diabetes Screening
  - 4.6.3 Weight Gain
- 4.7. Evidence-Based Delivery Care Practices
  - 4.7.1. Labor Monitoring
  - 4.7.2. Non-Invasive Technology
  - 4.7.3. Analgesia and Anesthesia

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- 4.8. Evidence-Based Intervention I
  - 4.8.1. Big baby
  - 4.8.2. Prolonged gestation
  - 4.8.3. Rupture of membranes
- 4.9. Evidence-Based Intervention II
  - 4.9.1. Oxytocin IV
  - 4.9.2. Fetal distress
  - 4.9.3. Labor Induction
- 4.10. Evidence-Based Intervention III
  - 4.10.1. Cord cutting
  - 4.10.2. Delivery

### Module 5. Home Birth

- 5.1. Birth and Delivery at Home
  - 5.1.1. Scientific Evidence of Home Birth
  - 5.1.2. History and Anthropology of Home Birth
  - 5.1.3. Obstetric Violence
  - 5.1.4. Knowing How to Support
- 5.2. Team Management and Organization
  - 5.2.1. Team Management and Organization
  - 5.2.2. Materials Required for Home Birth
  - 5.2.3. Information about Attendance: Selection-Exclusion Criteria
  - 5.2.4. Birth Record
- 5.3. Pregnancy Monitoring and Support
  - 5.3.1. Development of the Clinical History
  - 5.3.2. Most Common Pregnancy Difficulties and Deviations from Normality: Therapeutic Resources
  - 5.3.3. Birth Preparation: An Opportunity for Growth and Empowerment
  - 5.3.4. Home Visits



- 5.4. Assisting with Dilation
  - 5.4.1. Interpretation of Signs and Symptoms of Labor: When to Go to the Home
  - 5.4.2. How We Support Dilation at Home
  - 5.4.3. Non-pharmacological Resources for Pain Relief
  - 5.4.4. Deviations from Normality and Therapeutic Resources during Dilation
- 5.5. Support for Birth, Placental Detachment, and Delivery
  - 5.5.1. Descent and Delivery of the Baby (Expulsion)
  - 5.5.2. Dystocia and Resolutions
  - 5.5.3. Welcoming the Baby, Clamping the Umbilical Cord, and Initial Assessment
  - 5.5.4. Physiology, Deviations from Normality, and Resolutions of Placental Delivery
- 5.6. Dilation and Birth in Water
  - 5.6.1. Physiology of the Woman and the Baby for Water-Based Support
  - 5.6.2. Necessary Materials for Water Birth
  - 5.6.3. Procedures and Assistance Practices in Water Birth
  - 5.6.4. Safety and Precautions in Water Birth
- 5.7. Special Situations, Hospital Transfer, and Home Obstetric Emergencies
  - 5.7.1. Special Situations: Streptococcus Agalactia Positive, PROM without Dynamics, Prolonged Pregnancy, Previous Cesarean Section
  - 5.7.2. Hospital Transfer Criteria: Transfer Protocol and Documentation
  - 5.7.3. Obstetric Emergencies: Hemorrhage, Umbilical Cord Prolapse, Neonatal Resuscitation, Breech Presentation, Unexpected Breech Presentation
  - 5.7.4. Handling Critical Situations and Decision-Making
- 5.8. Postpartum Monitoring and Support
  - 5.8.1. Home Monitoring of the Mother: Physical and Emotional Assessment
  - 5.8.2. Home Monitoring of the Baby: General Well-being Assessment, Negative Rh Factor, Metabolic Tests
  - 5.8.3. The Placenta and Microbiota
  - 5.8.4. Information on Administrative Procedures

- 5.9. Mental Health in the Puerperium
  - 5.9.1. Breastfeeding: Most Common Pathologies and Difficulties
  - 5.9.2. Perinatal Death and Post-Traumatic Stress
  - 5.9.3. Miscarriages and Detection of Mental Health Warning Signs for Referral
  - 5.9.4. Strategies for Supporting Emotions During the Postpartum Period
- 5.10. Research and Pelvic Floor Care
  - 5.10.1. Research Methodology and Information Sources
  - 5.10.2. The Pelvic Floor: Anatomy, Functions, and Dysfunctions
  - 5.10.3. Pelvic Floor Care During and After Childbirth

### Module 6. Water Birth

- 6.1. Water Birth
  - 6.1.1. History and Global Practices of Water Use in Childbirth
  - 6.1.2. Principles and Practices of Gentle Birth
  - 6.1.3. Advantages of Birth in Water
  - 6.1.4. Physiological Effects of Water Birth
- 5.2. Physical and Physiological Foundations of Water Birth
  - 6.2.1. Archimedes' Principle and Its Relation to Water Birth
  - 6.2.2. Hormonal Control of Childbirth
  - 6.2.3. Physiological Changes During Immersion in Water
  - 6.2.4. Neonatal Adaptations to Water Birth
- 6.3. Criteria for Immersion in Water During Childbirth
  - 6.3.1. Appropriate Time for Water Immersion
  - 6.3.2. Common Contraindications for Water Birth
  - 6.3.3. Clinical Practices and Care Guidelines
  - 6.3.4. Emergency Evacuation
- 5.4. Monitoring and Control of Conditions During Water Birth
  - 6.4.1. Auscultation Guide
  - 6.4.2. Water Temperature
  - 6.4.3. Infection Control
  - 6.4.4. Body Mechanics and Safety Issues

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6.5.	Management of the Second Stage (Expulsion) in Water Birth			
	6.5.1.	Perineal Protection		
	6.5.2.	Preventing or Dealing with Delayed Shoulders or Dystocia		
	6.5.3.	Cord Issues		
	6.5.4.	Fetal Reflexes and Pelvic Anatomy		
6.6.	Neonatal Physiology and Assessment of the Newborn			
	6.6.1.	Mechanisms of Fetal Respiratory Protection		
	6.6.2.	Transitional Neonatal Physiology and First Breath		
	6.6.3.	Protecting and Seeding the Infant Microbiome		
	6.6.4.	Neonatal Resuscitation Practices		
6.7.	Physiological Third Stage and Postpartum Care			
	6.7.1.	Physiological Third Stage (Placental Delivery) Compared to Active Management		
	6.7.2.	Assessing blood loss to determine postpartum hemorrhage		
	6.7.3.	Exiting the bathtub		
	6.7.4.	Facilitating skin-to-skin contact and maternal kangaroo care		
6.8.	Initiation of breastfeeding and postpartum follow-up			
	6.8.1.	Initiation of Breastfeeding		
	6.8.2.	Monitoring and follow-up of the mother and the newborn's condition		
	6.8.3.	Emotional support and maternal well-being		
	6.8.4.	Returning home and adapting to family life		
6.9.	Complications and management of emergency situations			
	6.9.1.	Identification and prevention of specific complications in water birth		
	6.9.2.	Emergency interventions in water birth		
	6.9.3.	Emergency evacuation protocols and transfer to specialized care		
6.10.	Education, support, and resources for water birth			
	6.10.1.	Preparation and education for the mother and partner about water birth		
	6.10.2.	The role of the medical care team in water birth		
	6.10.3.	Educational resources and materials on water birth		

6.10.4. Support groups and communities for water birth

### Module 7. Natural Birth Units

- 7.1. Birth centers
  - 7.1.1. Differences from hospitals
  - 7.1.2. Benefits for women and professionals
  - 7.1.3. Examples of designs and architecture
  - 7.1.4. Services offered
- 7.2. Principles of design and architecture of birth centers
  - 7.2.1. Comfortable and safe environment
  - 7.2.2. Common Features
  - 7.2.3. Design of private rooms and common areas
- 7.3. Outdoor spaces and common areas in birth centers
  - 7.3.1. Function and benefits of outdoor spaces
  - 7.3.2. Design and maintenance of common areas
  - 7.3.3. Integration with the natural environment
- 7.4. Services offered by birth centers
  - 7.4.1. Prenatal care and childbirth education
  - 7.4.2. Emotional and physical support during labor
  - 7.4.3. Postnatal and follow-up services
  - 7.4.4. Collaboration and referral to hospitals in case of complications
- 7.5. Promotion and support of birth centers
  - 7.5.1. Importance in the care of low-risk pregnancies
  - 7.5.2. Role of organizations like the American Association of Birth Centers
  - 7.5.3. Challenges in the implementation of birth centers
  - 7.5.4. Opportunities in obstetric care
- 7.6. Services offered by hospital maternity units
  - 7.6.1. Prenatal care and fetal monitoring
  - 7.6.2. Pain management during childbirth
  - 7.6.3. Postnatal and follow-up services
  - 7.6.4. Comparison with birth centers

- 7.7. Comparison of safety, comfort, and women's satisfaction
  - 7.7.1. Advantages and disadvantages of birth centers
  - 7.7.2. Advantages and disadvantages of hospital maternity units
  - 7.7.3. Safety factors in both types of facilities
  - 7.7.4. Levels of comfort and women's satisfaction
- 7.8. Role of professionals in birth centers and hospital maternity units
  - 7.8.1. Differences in the role of professionals
  - 7.8.2. Training and education to work in birth centers and hospital maternity units
  - 7.8.3. Levels of collaboration and teamwork among professionals
  - 7.8.4. Assessment of the quality of care
- 7.9. Planning and management of birth centers
  - 7.9.1. Requirements
  - 7.9.2. Financing and sustainability
  - 7.9.3. Personnel selection and training
  - 7.9.4. Assessment and continuous improvement of the quality of care
- 7.10. Trends and future perspectives in the development of birth centers and hospital maternity units
  - 7.10.1. Technological and design innovations
  - 7.10.2. New policies and regulations
  - 7.10.3. Development of woman- and family-centered care models
  - 7.10.4. Opportunities and challenges in obstetric care in the future

### Module 8. Newborn Needs

- 8.1. The newborn in natural childbirth
  - 8.1.1. Definition of natural childbirth
  - 8.1.2. Benefits of natural childbirth
  - 8.1.4. Importance of newborn monitoring
- 8.2. First minutes after birth
  - 8.2.1. Immediate Assessment of the Newborn
  - 8.2.2. Breathing establishment
  - 8.2.3. First skin-to-skin contact
  - 8.2.4. Early initiation of breastfeeding

- 8.3. Monitoring of vital signs
  - 8.3.1. Measurement of Heart Rate
  - 8.3.2. Monitoring of respiratory rate
  - 8.3.3. Control of body temperature
  - 8.3.4. Assessment of coloration and perfusion
- 8.4. Physical Examination of the Newborn
  - 8.4.1. Measurement of weight, height, and head circumference
  - 8.4.2. General body inspection
  - 8.4.3. Assessment of reflexes and muscle tone
  - 8.4 4. Detection of warning signs
- 8.5. The Umbilical Cord
  - 8.5.1. Clamping and cutting procedure
  - 8.5.2. Cleaning and Maintenance
  - 8.5.3. Observation of infection signs
  - 8.5.4. Late cutting
- 8.6. Screening tests and prevention
  - 8.6.1. Administration of vitamin K
  - 8.6.2. Neonatal conjunctivitis prophylaxis
  - 8.6.3. Heel prick test
  - 8.6.4. Initial immunization
- 8.7. Vaccines
  - 8.7.1. Benefits
  - 8.7.2. Inconveniences
  - 8.7.3. How to advise
  - 8.7.4. How to promote natural immunization
- 8.8. Skin hygiene and care
  - 8.8.1. Bathing and cleaning the newborn
  - 8.8.2. Diaper care and prevention of dermatitis
  - 8.8.3. Identification of common skin problems
  - 8.8.4. Use of appropriate skin products

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9.4.3. Emergency Contraception 9.4.4. Counseling and education

8.9. Sleep and prevention of sudden infant death syndrome

	8.9.1.	Guidelines for safe sleep		9.5.1.	Causes an
	8.9.2.	Proper sleeping position		9.5.2.	Procedure
	8.9.3.	How to recognize and reduce risk factors		9.5.3.	Physical a
	8.9.4.	Establishing routines and a conducive environment		9.5.4.	Prevention
8.10.	Medica	al follow-up and development	9.6.	The em	npty crib: the
	8.10.1.	Follow-up visits		9.6.1.	Emotional
	8.10.2.	Parameters to be Measured		9.6.2.	Support ar
	8.10.3.	Monitoring during check-ups		9.6.3.	Recovery
Mod	ا ۱ مایا	Matharia Nagda		9.6.4.	Prevention
IVIOU	iule 9. I	Mother's Needs	9.7.	Psycho	logical care
9.1.	Norma	l postpartum		9.7.1.	Identificat
	9.1.1.	Physical and emotional changes		9.7.2.	Intervention
	9.1.2.	Immediate care		9.7.3.	Support ne
	9.1.3.	Breastfeeding		9.7.4.	Strengther
	9.1.4.	Pelvic floor recovery	9.8.	Perinat	al mood dis
9.2.	Afterpa	ains		9.8.1.	Postpartui
	9.2.1.	Causes and physiology		9.8.2.	Postpartui
	9.2.2.	Pain Management		9.8.3.	Post-Traur
	9.2.3.	Duration and progression		9.8.4.	Detection,
	9.2.4.	Prevention and care	9.9.	Obstetr	ric trauma
9.3.	The fire	st menstruation		9.9.1.	Causes an
	9.3.1.	Return of menstruation		9.9.2.	Prevention
	9.3.2.	Factors influencing its reappearance		9.9.3.	Short and
	9.3.3.	Menstruation and breastfeeding		9.9.4.	Support ar
	9.3.4.	Changes in the menstrual cycle	9.10.	Obstetr	ric Violence
9.4.	Postpa	rtum contraception		9.10.1.	Types and
	9.4.1.	Breastfeeding-friendly contraceptive methods		9.10.2.	Prevention
	942	Start of postpartum contraception		0.10.4	Interdiscin

9.5.	Sponta	neous and induced abortion
	9.5.1.	Causes and Risk Factors
	9.5.2.	Procedures and Care
	9.5.3.	Physical and emotional recovery
	9.5.4.	Prevention and counseling
9.6.	The en	npty crib: the painful process of losing a late-term pregnancy
	9.6.1.	Emotional impact and grief
	9.6.2.	Support and companionship
	9.6.3.	Recovery process
	9.6.4.	Prevention and management of future pregnancies
9.7.	Psycho	ological care after childbirth
	9.7.1.	Identification of emotional issues
	9.7.2.	Interventions and emotional support
	9.7.3.	Support networks and available resources
	9.7.4.	Strengthening the couple and family relationship
9.8.	Perinat	al mood disorders
	9.8.1.	Postpartum Depression
	9.8.2.	Postpartum anxiety
	9.8.3.	Post-Traumatic Stress Disorder
	9.8.4.	Detection, Prevention and Treatment
9.9.	Obstet	ric trauma
	9.9.1.	Causes and Risk Factors
	9.9.2.	Prevention and management of obstetric trauma
	9.9.3.	Short and Long-Term Consequences

9.9.4. Support and resources for recovery

9.10.2. Prevention and awareness

9.10.1. Types and manifestations of obstetric violence

9.10.4. Interdisciplinary approach and professional training

### Module 10. Delivery Preparation

- 10.1. Anatomy and physiology of pregnancy
  - 10.1.1. Changes in the maternal body
  - 10.1.2. Fetal Development
  - 10.1.3. Hormonal process
  - 10.1.4. Preparation for labor
- 10.2. Stages of labor
  - 10.2.1. First Stage: Dilatation
  - 10.2.2. Second Stage: Expulsion
  - 10.2.3. Third Stage: Delivery
  - 10.2.4. Fourth Stage Recovery
- 10.3. Relaxation and breathing techniques
  - 10.3.1. Deep and controlled breathing
  - 10.3.2. Visualization Techniques
  - 10.3.3. Massages and muscle relaxation techniques
  - 10.3.4. Mindfulness and meditation
- 10.4. Prenatal exercises and physical preparation
  - 10.4.1. Muscle strengthening
  - 10.4.2. Flexibility and mobility
  - 10.4.3. Specific exercises for childbirth
  - 10.4.4. General physical activity recommendations
- 10.5. Nutrition during pregnancy
  - 10.5.1. Specific Nutritional Needs
  - 10.5.2. Recommended and not recommended foods
  - 10.5.3. Weight Control
  - 10.5.4. Vitamin and mineral supplements
- 10.6. Birth plan development
  - 10.6.1. Personal preferences
  - 10.6.2. Pain Relief Methods
  - 10.6.3. Birth positions
  - 10.6.4. Contingency Plans

- 10.7. Interdisciplinary collaboration in childbirth care
  - 10.7.1. Role of each professional in childbirth care
  - 10.7.2. Development of clinical skills in childbirth care
  - 10.7.3. Childbirth care in interdisciplinary teams
  - 10.7.4. Leadership skills in obstetric care
- 10.8. Emotional preparation for childbirth
  - 10.8.1. Managing fear and anxiety
  - 10.8.2. Emotional support from the partner and family
  - 10.8.3. Coping techniques
  - 10.8.4. Emotional connection with the baby
- 10.9. Childbirth preparation for high-risk patients
  - 10.9.1. Identification and management of risk factors
  - 10.9.2. Medical planning and follow-up
  - 10.9.3. Specific interventions and care
  - 10.9.4. Emotional support and additional resources
- 10.10. Family involvement in childbirth education and preparation
  - 10.10.1. Inclusion of the partner and other family members
  - 10.10.2. Prenatal classes and joint educational activities
  - 10.10.3. Preparation for emotional and practical support
  - 10.10.4. Adaptation and family roles in the postpartum



## tech 38 | Methodology

#### At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

With TECH you will experience a way of learning that is shaking the foundations of traditional universities around the world.



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the physician's professional practice.



Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method"

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

- Students who follow this method not only achieve the assimilation of concepts, but also a development of their mental capacity, through exercises that evaluate 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.





## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning

This university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, a real revolution with respect to the mere study and analysis of cases.

Professionals will learn through real cases and by resolving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.



## Methodology | 41 tech

At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

With this methodology, more than 250,000 physicians have been trained with unprecedented success in all clinical specialties regardless of surgical load. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

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.

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.

The overall score obtained by TECH's learning system is 8.01, according to the highest international standards.

## tech 42 | Methodology

This program offers the best educational material, prepared with professionals in mind:



#### **Study Material**

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### **Surgical Techniques and Procedures on Video**

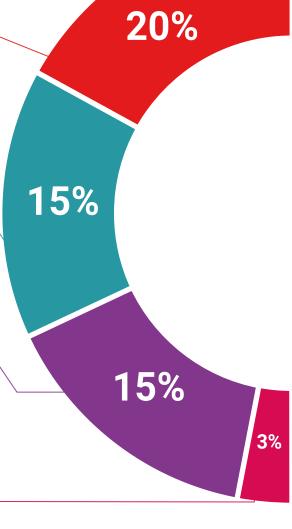
TECH introduces students to the latest techniques, the latest educational advances and to the forefront of current medical techniques. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### **Interactive Summaries**

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

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





#### **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.

## **Expert-Led Case Studies and Case Analysis**

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



### **Testing & Retesting**

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



#### Classes

There is scientific evidence on the usefulness of learning by observing experts.

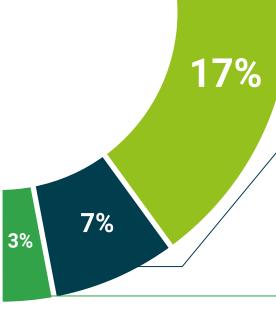
The system known as Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### **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.









## tech 46 | Certificate

This program will allow you to obtain your **Master's Degree diploma in Natural Childbirth** 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: Master's Degree in Natural Childbirth

Modality: online

Duration: 12 months

Accreditation: 60 ECTS







<sup>\*</sup>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.



# Master's Degree

Natural Childbirth

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

