

Postgraduate Certificate

Second Trimester Ultrasound



Postgraduate Certificate Second Trimester Ultrasound

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/medicine/postgraduate-certificate/second-trimester-ultrasound

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01 Introduction

Second Trimester Ultrasound is a fundamental tool in the monitoring of pregnancy, since it allows the detection of possible fetal anomalies, contributing to a better planning of the delivery and a detailed care of the mother and fetus. Its relevance in the prenatal period has led to the improvement of its techniques to offer more rigorous results, an evolution that the specialist must be aware of in order to be at the medical forefront. At this juncture, TECH has opted to design this program, with which the students will detect recent advances in the assessment of the risk of premature birth or ultrasound markers of chromosomopathy during this stage. All this, enjoying a 100% online learning and without making uncomfortable trips to a study center.





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The Postgraduate Certificate in Second Trimester Ultrasound will enable you to learn the latest scientific evidence regarding ultrasound markers of chromosomopathy during this stage”

Second Trimester Ultrasound is an essential diagnostic technique in the monitoring of pregnancy, as it contributes directly to the evaluation of proper fetal development. In this line, its use is essential to detect malformations, growth alterations, placental problems and other complications that can affect both the health of the fetus and the mother. That is why the ultrasound devices used in this field have evolved significantly over the last few years, seeking to improve the results obtained in order to optimize the gestation process. Thus, it is essential for physicians to keep up to date in this field so as not to be left behind with respect to the advances in the sector.

For this reason, TECH has created this qualification, which will provide the specialists with the most updated knowledge in Second Trimester Ultrasound. Throughout this academic period, you will identify cutting-edge techniques for assessing the placenta and umbilical cord, fetal malformations or sophisticated strategies for establishing a cervical evaluation. Likewise, you will learn about the latest scientific findings in relation to ultrasound markers of chromosomopathy in the second trimester.

Thanks to the fact that this very complete program is totally virtual, the students can have access to its didactic content at any time and from any place they wish, which provides great flexibility to organize the academic resources according to the professional's requirements. In addition, the *Relearning* pedagogical methodology allows the specialists to update autonomously, without the need to adhere to strict time constraints.

This **Postgraduate Certificate in Second Trimester Ultrasound** contains the Scientific most complete and up-to-date program on the market. Its most outstanding features are:

- ♦ The development of practical cases presented by experts in Obstetric and Gynecologic Ultrasound
- ♦ 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



Identify the state-of-the-art techniques for placenta and umbilical cord assessment through this Postgraduate Certificate"

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Study from anywhere in the world and 24 hours a day thanks to the flexibility that this program gives you”

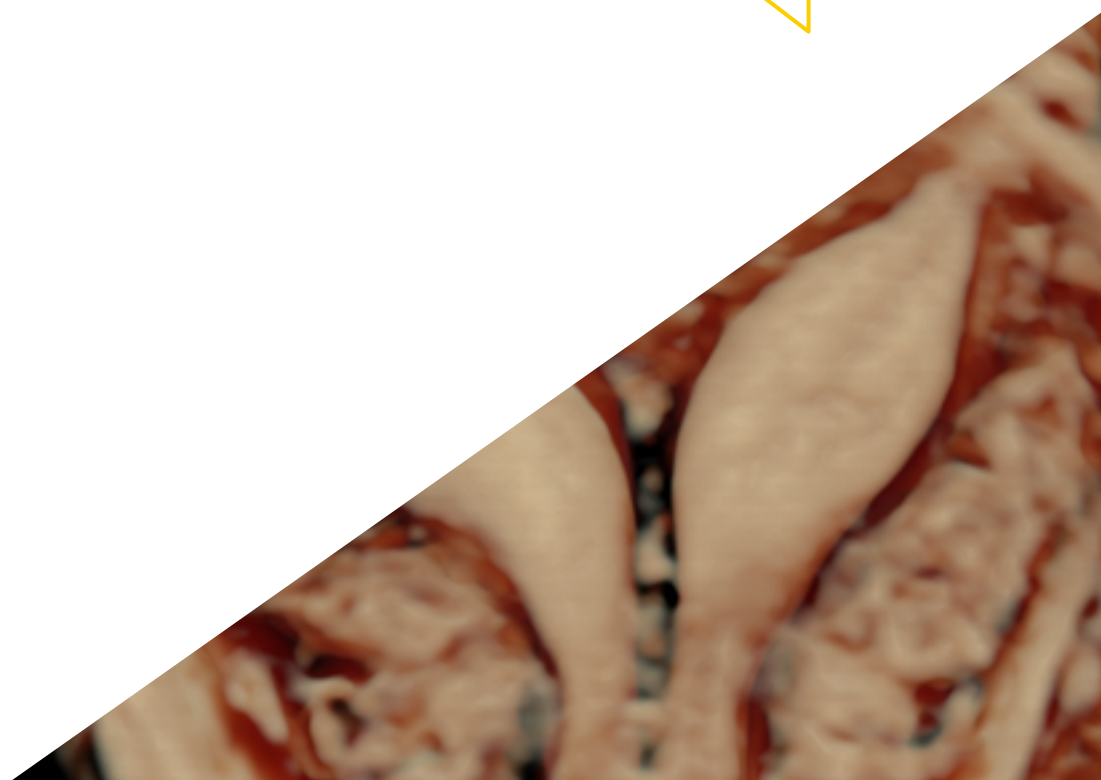
The program's teaching staff includes professionals from sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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

The design of this program focuses on Problem-Based Learning, by means of which the professionals must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned experts.

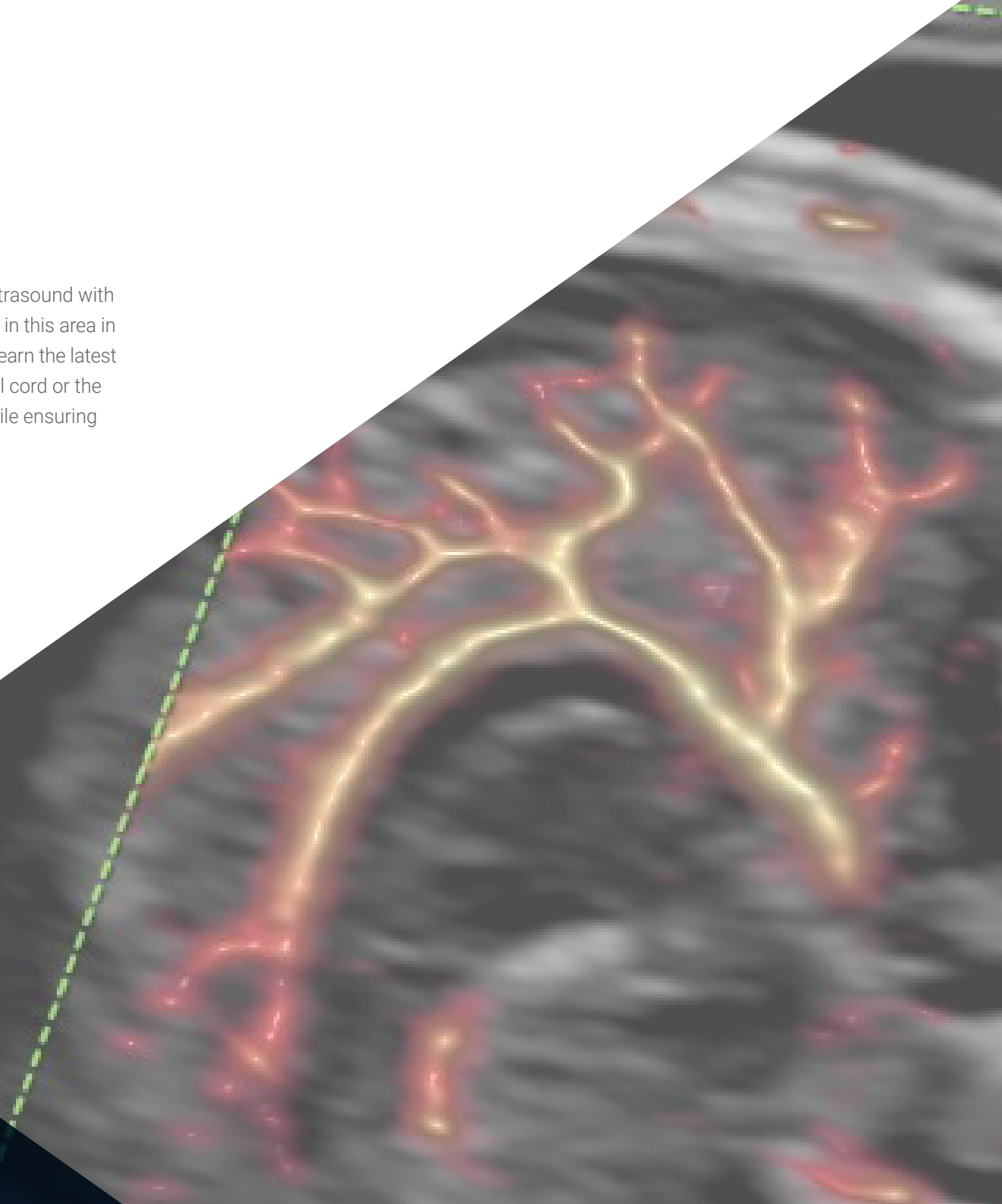
The Relearning system of this program allows you to learn at your own pace and without time constraints.

Obtain your desired professional update in only 6 weeks and boost your medical career.



02 Objectives

TECH has designed the Postgraduate Certificate in Second Trimester Ultrasound with the intention of providing students with the most cutting-edge knowledge in this area in only 150 hours of learning. Through this program, students will be able to learn the latest advances in areas such as the assessment of the placenta and umbilical cord or the study of malformations of the face, neck and thorax. All of the above, while ensuring the achievement of the following general and specific objectives.



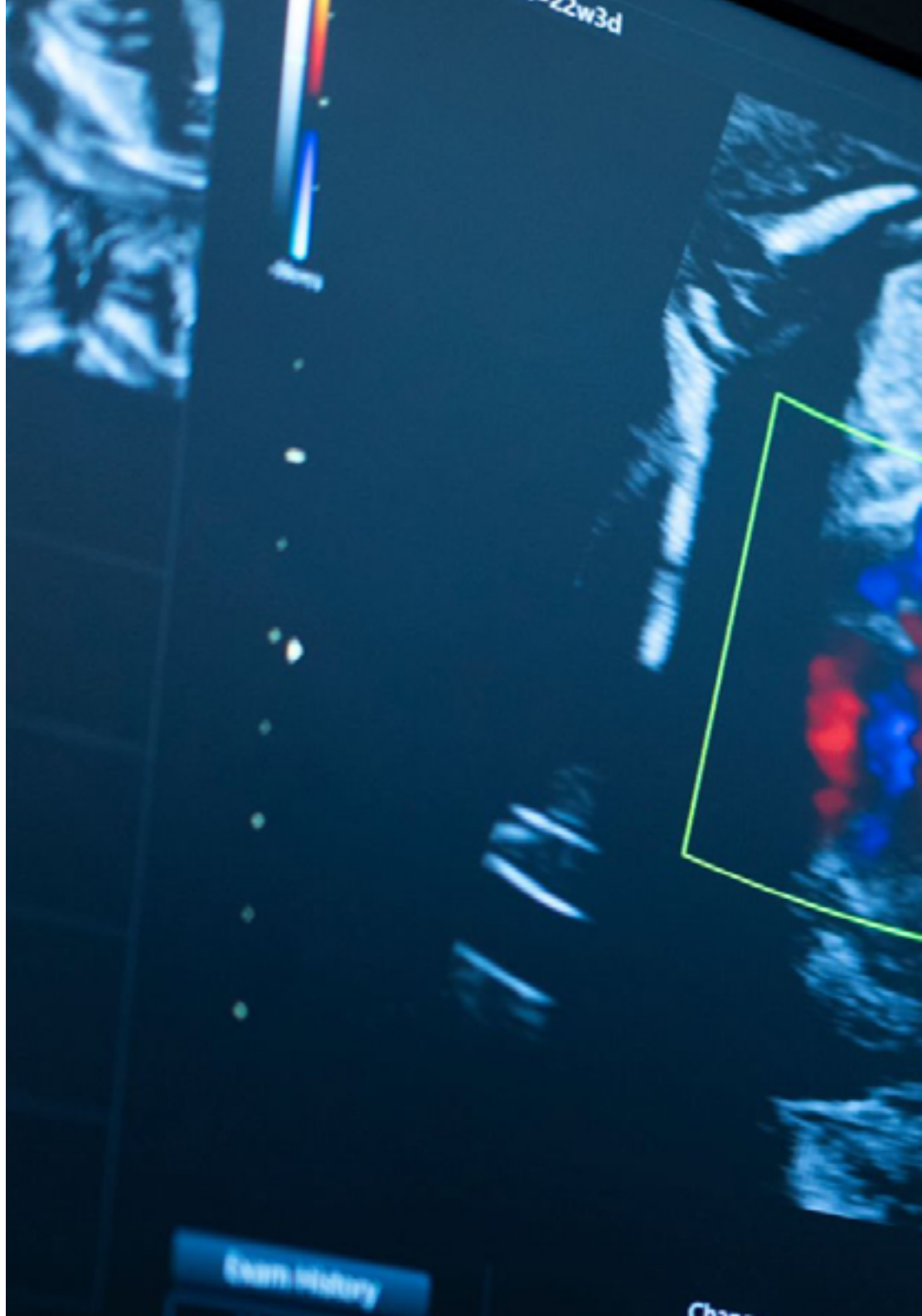
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Do you want to be at the forefront of medicine in just 6 weeks? Take this program and reach your professional goals with confidence!”



General Objectives

- ♦ Get to know in depth the normal gynecological and obstetric ultrasound study, as well as the most used techniques
- ♦ Have an in-depth knowledge of the malformations that can be diagnosed in the first trimester of gestation and the ultrasound markers, as well as the invasive techniques and screening for aneuploidy and preeclampsia and the usefulness of fetal DNA in maternal blood
- ♦ Study the diagnosable pathology in the third trimester as well as intrauterine growth restriction and fetal hemodynamics, correctly applying maternal-fetal Doppler
- ♦ Learn the most important concepts about fetal neurosonography and echocardiography as well as the most relevant pathologies
- ♦ Study multiple gestation (monochorionic and bicorionic) and its most frequent complications





Specific Objectives

- Learn in depth the second trimester ultrasound study protocol, its basic sections and normality
- Study the spectrum of placenta accreta and the keys to an accurate ultrasound diagnosis
- Learn about cervical assessment by ultrasound and the risk of preterm labor in the second trimester
- Identify ultrasound markers of second trimester aneuploidy
- Understand the main malformations that can be diagnosed in the second trimester by apparatus and systems
- Study the main ultrasound features of fetal hydrops and its management

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Be able to know the latest advances in ultrasound diagnosis of fetal malformations through this qualification”

03

Course Management

In order to guarantee academic excellence, TECH has chosen a distinguished team of professors composed of highly trained specialists in the field of Obstetric and Gynecologic Ultrasound to lead this program. These professionals are in charge of creating the didactic resources that the students will enjoy throughout the program, which guarantees that the knowledge acquired will be extremely useful in daily medical practice.



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Routine OB
Har-mid
Pwr 87 %
Gn 10
C6 / M6
E3
SRI II 4 / CRI 3

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This program is taught by the best specialists in Ultrasound of the Second Trimester, who will elaborate the didactic contents of the program”

Management



Dr. García-Manau, Pablo

- ◆ Obstetrician and Gynecologist at Quirónsalud Hospital in Barcelona
- ◆ Assistant Physician of the Gynecology and Obstetrics Service at the University Hospital of Santa Creu i Sant Pau
- ◆ Specialist in Maternal-Fetal Medicine
- ◆ Specialist in Obstetric Ultrasound and Fetal Echocardiography
- ◆ Member of: Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

Professors

Dr. López-Quesada, Eva

- ◆ Coordinator of the Obstetrics and Gynecology Service at the University Hospital Mútua Terrassa
- ◆ Specialist in Prenatal Diagnosis and Maternal-Fetal Medicine
- ◆ PhD from the Autonomous University of Barcelona
- ◆ Postgraduate in Fetal Medicine and in Clinical Genetics and Genomics
- ◆ Member of: Clinical Commission for Quality Control of First Trim Ultrasound of Catalá, Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

Dr. Higuera, Teresa

- ◆ Head of the Obstetric Ultrasound Unit of the Obstetrics Department at Vall d'Hebron University Hospital
- ◆ Specialist of the Obstetrics Service at the Vall d'Hebron University Hospital
- ◆ PhD from the University of Zaragoza
- ◆ Practical stay in Fetal Medicine at the King's College Hospital. London
- ◆ Associate Professor at Autonomous University of Barcelona
- ◆ Member of: Spanish Society of Gynaecology and Obstetrics (SEGO)

Dr. Arévalo, Silvia

- ♦ Head of Section Obstetrics Service of the Vall d'Hebron Hospital
- ♦ Specialist in Prenatal Diagnosis and Fetal Medicine and Maternal-Fetal Echocardiography
- ♦ Member of: Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

Dr. Rodó, Carlota

- ♦ Attending Physician of the Obstetrics Service at the Vall d'Hebron University Hospital
- ♦ Specialist in Prenatal Diagnosis and Fetal Medicine and Maternal-Fetal neurosonography
- ♦ PhD from the Autonomous University of Barcelona
- ♦ Member of the Spanish Association of Prenatal Diagnosis (AEDP) and of the Ultrasound Section of the Catalan Society of Obstetrics and Gynecology (SCOG)
- ♦ Member of: Spanish Society of Gynaecology and Obstetrics (SEGO)

Dr. Maroto, Anna

- ♦ Chief of Gynecology and Obstetrics Service at the University Hospital Doctor Josep Trueta
- ♦ Specialist in Fetal Medicine
- ♦ Associate Professor at University of Girona
- ♦ Member of the Ultrasound and Fetal Medicine Section of the Catalan Society of Obstetrics and Gynecology (SCOG)
- ♦ PhD from the Autonomous University of Barcelona

Dr. Martínez, Clara

- ♦ Chief of Gynecology and Obstetrics Service at the University Hospital Doctor Josep Trueta
- ♦ Specialist in Prenatal Diagnosis
- ♦ Member of: Spanish Obstetric Safety Group

Dr. Sánchez, María Ángeles

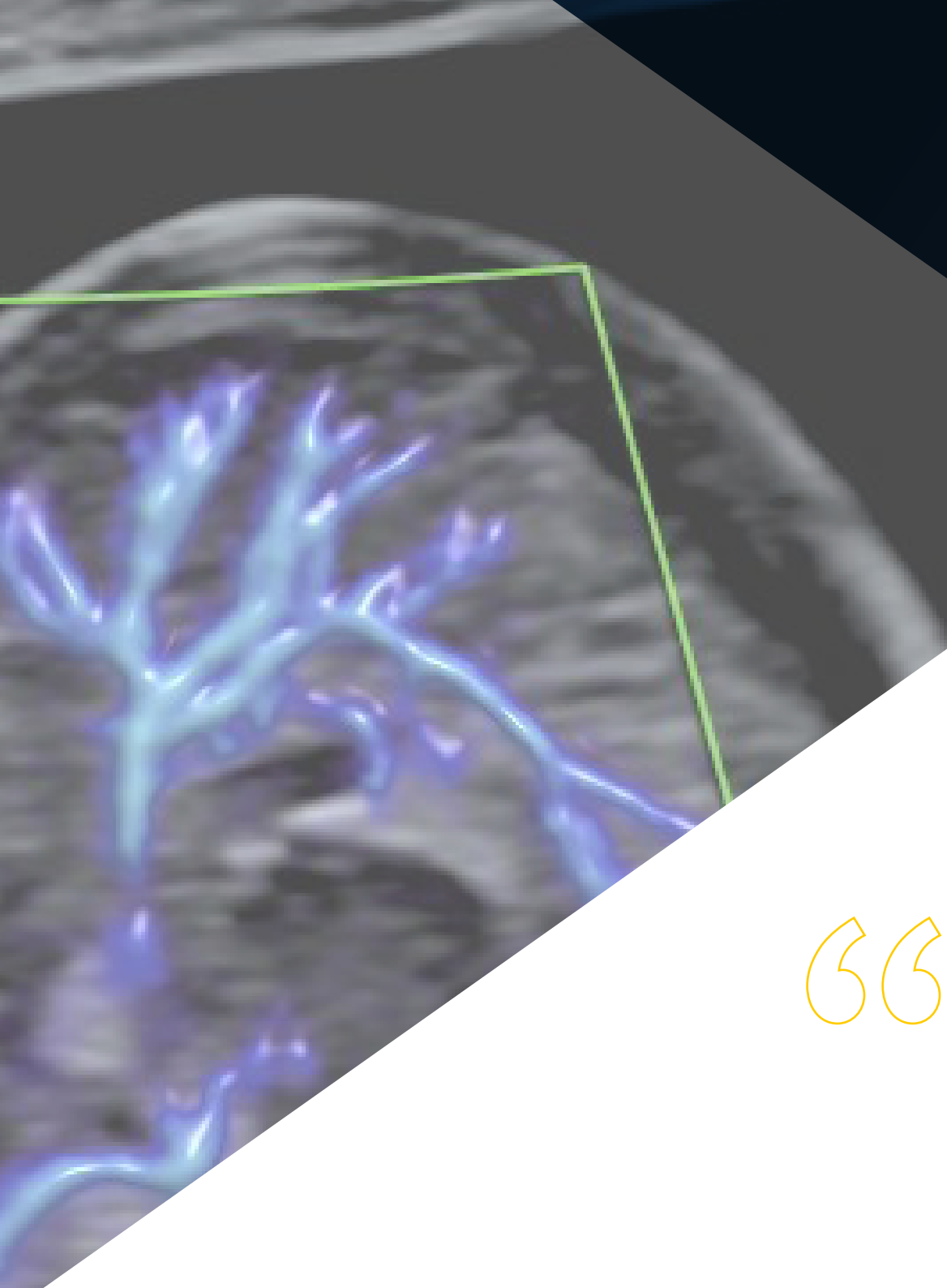
- ♦ Head of the Prenatal Diagnostic Unit of the Obstetrics Service at the Vall d'Hebron University Hospital
- ♦ Specialist of the Obstetrics Service at the Vall d'Hebron University Hospital
- ♦ Specialist in Prenatal Diagnosis and Maternal-Fetal Medicine
- ♦ Doctor of Medicine from the University of Barcelona
- ♦ Member of: Catalan Society of Obstetrics and Gynecology (SCOG), Spanish Society of Gynecology and Obstetrics (SEGO)

04

Structure and Content

This program has been carefully designed to provide specialists with the latest developments in the field of Second Trimester Ultrasound. The qualification offers a wide variety of didactic content in different formats, including videos, reading materials and interactive summaries, which provides students with flexibility and convenience when studying. In addition, the online modality allows them to adapt their study schedule according to their professional or personal needs and responsibilities.





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This syllabus has been designed by the best experts in Second Trimester Ultrasound to provide you with the most useful knowledge in this field”

Module 1. Second Trimester Ultrasound

- 1.1. Protocol for the study of second trimester ultrasound, normality
 - 1.1.1. Gestational age and second trimester dating
 - 1.1.2. Skull and central nervous system
 - 1.1.3. Limbs and spine
 - 1.1.4. Thorax and heart
 - 1.1.5. Abdomen
 - 1.1.6. Genitourinary system
- 1.2. Assessment of the placenta and umbilical cord
 - 1.2.1. Abnormalities of placental shape, location and insertion
 - 1.2.2. Placental tumors
 - 1.2.3. Vascular anomalies and hematomas
 - 1.2.4. Abnormalities of the cord
- 1.3. Spectrum of placenta accreta
 - 1.3.1. Classification
 - 1.3.2. Ultrasound Diagnosis
 - 1.3.3. Magnetic Resonance
 - 1.3.4. Management
- 1.4. Cervical assessment. Risk of Premature Delivery
 - 1.4.1. Measurement Techniques
 - 1.4.2. Risk of Premature Delivery
 - 1.4.3. Recommendations of scientific societies
- 1.5. Ultrasound markers of second trimester chromosomopathy
 - 1.5.1. History of second trimester markers
 - 1.5.2. Likelihood ratio
 - 1.5.3. Ultrasound markers
 - 1.5.4. Management



- 1.6. Malformations of the abdomen and abdominal wall
 - 1.6.1. Umbilical Hernia
 - 1.6.2. Omphalocele
 - 1.6.3. Gastroschisis
 - 1.6.4. Bladder exstrophy
 - 1.6.5. Other abdominal wall anomalies
 - 1.6.6. Abdominal cysts
 - 1.6.7. Gastrointestinal Pathology
- 1.7. Malformations of the face, neck and thorax
 - 1.7.1. Facial malformations
 - 1.7.2. Malformations of the neck
 - 1.7.3. Thoracic Malformations
- 1.8. Spinal malformations
 - 1.8.1. Hemivertebra
 - 1.8.2. Neural Tube Defects
 - 1.8.3. Sacrococcygeal Teratomas
 - 1.8.4. Flow regression sequence
- 1.9. Limb malformations
 - 1.9.1. Skeletal Dysplasias
 - 1.9.2. Clubfoot
 - 1.9.3. Reductional alterations
 - 1.9.4. Arthrogryposis
- 1.10. Genitourinary malformations
 - 1.10.1. Renal agenesis
 - 1.10.2. Obstructive Pathology
 - 1.10.3. Renal ectopias
 - 1.10.4. Multicystic and polycystic kidney
 - 1.10.5. Other renal anomalies
 - 1.10.6. Adrenal abnormalities
 - 1.10.7. Bladder anomalies
 - 1.10.8. Genital abnormalities

- 1.11. Fetal Hydrops
 - 1.11.1. Definition
 - 1.11.2. Ultrasound abnormalities
 - 1.11.3. Etiology
 - 1.11.4. Management
 - 1.11.5. Prognosis
 - 1.11.6. Associated Complications
 - 1.11.7. Recurrence



Study through didactic formats such as video or interactive summary to fully enliven your academic experience”

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





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Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

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.

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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:

1. 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.



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.



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.



06 Certificate

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



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

This program will allow you to obtain your **Postgraduate Certificate in Second Trimester Ultrasound** 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: **Postgraduate Certificate in Second Trimester Ultrasound**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**.





Postgraduate Certificate Second Trimester Ultrasound

- » Modality: online
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Postgraduate Certificate

Second Trimester Ultrasound