

# Postgraduate Certificate

## Update on Coagulation, Thrombosis and Fibrinolysis Tests





## Postgraduate Certificate

### Update on Coagulation, Thrombosis and Fibrinolysis Tests

- » Modality: Online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 5 ECTS
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtute.com/us/medicine/postgraduate-certificate/update-coagulation-thrombosis-fibrinolysis-tests](http://www.techtute.com/us/medicine/postgraduate-certificate/update-coagulation-thrombosis-fibrinolysis-tests)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Course Management

---

*p. 12*

04

Structure and Content

---

*p. 18*

05

Methodology

---

*p. 22*

06

Certificate

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*p. 30*

# 01

# Introduction

This program in Update on Coagulation, Thrombosis and Fibrinolysis Tests is designed to prepare medical professionals in these techniques, in order to update their knowledge to be able to offer the best treatments to their patients. Professionals should not miss this opportunity and join the TECH student community. They will advance in your career thanks to this 100% online program.



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*Delve into the international practice of coagulation, thrombosis and fibrinolysis tests with a Masterclass given by a prestigious reference in the area”.*

At present, the specialty of hematology is a pioneer in innovation in the areas of diagnosis and treatment, and it should be noted that hematologists are leaders in the clinical application of immunotherapy in the fight against the different hematological cancers.

The different scientific societies of this specialty throughout the world strive to rapidly incorporate the results of biomedical research into clinical practice, especially the treatment of hematological malignancies (hematological cancers), but also of iron deficiency and anemias, the administration of Direct-Acting Oral Anticoagulants-ACODs, bone marrow transplants, and, in the long term, research focused on obtaining artificial blood with the ultimate goal of getting health managers to include these techniques as soon as possible into the health services of national health systems.

The reasons why hematology and hemotherapy is one of the medical disciplines that have made most progress in knowledge and technology in recent decades lie in the integration of biological and clinical knowledge, which has led to a better understanding of the mechanisms of disease, facilitating the development of more appropriate guidelines for clinical action. All this has contributed to the fact that Hematology and Hemotherapy have reached a remarkable degree of maturity and justifies its permanence in the future as an integrated specialty, this being the ideal framework for the training and global improvement of specialists in this area of medical knowledge.

This Postgraduate Certificate in Update on Coagulation, Thrombosis and Fibrinolysis Tests supports the latest research advances and the highest scientific evidence, based on the most important international scientific rigor. In addition, it includes a masterclass given by a world reference in the area of hematology, giving an international focus to all the revised contents. This program is aimed at healthcare professionals who wish to get up to date on the most rigorous coagulation, thrombosis and fibrinolysis tests. The program is supported by a multidisciplinary approach, covering the most relevant hematological areas.

This **Postgraduate Certificate in Update on Coagulation, Thrombosis and Fibrinolysis Tests** contains the most comprehensive and up-to-date educational program on the market. Its most notable features are:

- ◆ The development of clinical cases presented by experts in hematology
- ◆ Its graphic, schematic and practical contents provide scientific and assistance information on those disciplines that are essential for professional practice
- ◆ Diagnostic therapeutic developments on assessment, diagnosis, and treatment in hematology patients
- ◆ Practical exercises where the self-assessment process can be used to improve learning
- ◆ The iconography of clinical and diagnostic imaging tests
- ◆ An algorithm-based interactive learning system for decision-making in the clinical situations presented throughout the course.
- ◆ With special emphasis on evidence-based medicine and research methodologies in hematology
- ◆ 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.



*This program is the best investment you can make to acquire the best and most up-to-date specialization in Update on Coagulation, Thrombosis and Fibrinolysis Tests"*

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*With the Postgraduate Certificate in Coagulation, Thrombosis and Fibrinolysis Testing Update you have the opportunity to update your knowledge in a comfortable way and without renouncing to the maximum scientific rigor"*

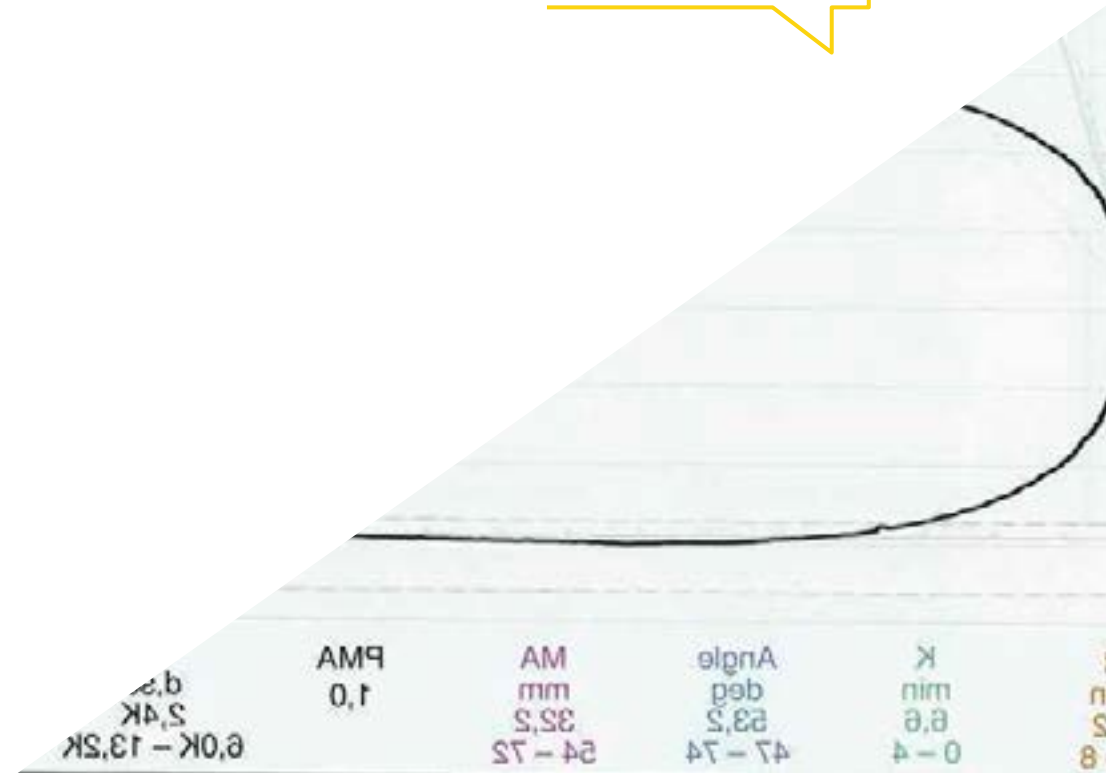
The program's teaching staff includes professionals from the sector who contribute their work experience to this educational program, as well as renowned specialists from leading societies and prestigious universities.

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 course. For this purpose, students will be assisted by an innovative interactive video system created by renowned and experienced experts.

*This Postgraduate Certificate offers specialization in simulated environments, which provides an immersive learning experience designed to prepare you for real-life situations.*

*It includes clinical cases to bring the program as close as possible to the reality of care in medicine.*



# 02 Objectives

The main objective of the program is the improvement of specialists, based on the acquisition of the most up-to-date and innovative scientific knowledge in the field of hematology and hemotherapy that will allow them to develop the professional skills and competencies that will turn their daily clinical practice into a bastion of the standards of the best available scientific evidence, with a critical, innovative, multidisciplinary and integrative sense, according to the recent advances in the specialty.





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*This program will generate a sense of confidence in the performance of medical practice, which will help you grow personally and professionally"*



## General Objective

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- ◆ Update the specialist's knowledge through the latest scientific evidence in the use of diagnostic and therapeutic means for hematologic diseases, in order to develop comprehensive prevention, diagnosis, treatment and rehabilitation actions, with a multidisciplinary and integrative approach that facilitates medical care with the highest quality standard for the control and follow-up of hematologic patients.

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*Don't miss the opportunity and get up to date on new developments in Coagulation, Thrombosis and Fibrinolysis Testing to incorporate them into your daily medical practice”*





## Specific Objectives

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- ◆ Identify in detail the latest advances in coagulation, thrombosis and fibrinolysis tests
- ◆ Recognize the main medical test extraction instruments
- ◆ Analyze the different types of results obtained after the tests have been performed
- ◆ Identify the main treatments and intervention models in cases of blood coagulation, thrombosis and fibrinolysis

# 03

## Course Management

Prestigious and renowned medical specialists with numerous publications, extensive teaching experience and professional experience in many countries, where many of the diseases studied have a high morbimortality, have participated in this program. The teaching team is made up of a multidisciplinary faculty from various medical specialties, such as hematology, internal medicine, pediatrics, gynecology and obstetrics, pathological anatomy, and pharmacology who are involved in the care of these patients.



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*You will have at your disposal a faculty highly committed to your updating, so that they will contribute significantly to the acquisition of your new knowledge”.*

## International Guest Director

Dr. Joseph Hai Oved is a **Pediatrician specialized in Hemato-oncology** at the Memorial Sloane Kettering Cancer Center, considered one of the best cancer centers in the world. His work focuses on **stem cell and bone marrow transplants**, as well as **cell therapies**, to treat non-cancerous diseases. His work in the field of transplantation to patients with difficult-to-treat immune dysfunctions or inherited immune deficiencies, as well as those with bone marrow failure syndromes, especially stands out.

His research is prolific in the hemato-oncology area, seeking new ways to personalize transplantation to achieve a precise cure with minimal side effects.

He has studied in depth the effects of the different **techniques** used to manipulate **donated stem cells**, extracting or adding specific cells of interest. It has also analyzed how exposure to different conditioning agents (chemotherapies or other drugs used to prepare the body for transplantation) affect outcomes. His work has led to advances in the **identification of biomarkers** to more accurately predict transplant outcomes.

Joseph is a member of **several national and international groups in bone marrow transplantation, hematology and immunology**. He serves on committees for many of these organizations, where they discuss the potential for future therapies, clinical trials and efforts to further advance the field of pediatric transplantation and cellular therapies worldwide.

All his scientific contribution places him as a reference in his area, receiving several awards. These include two Fellowships, awarded by the Howard Hughes Medical Institute, one of the largest privately funded organizations for biological and medical research in the United States. Furthermore, he also obtained a **Fellowship in immunology** from the Weizmann Institute of Science, considered one of the most advanced multidisciplinary research institutions in the world.



## Dr. Oved, Joseph Hai

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- Pediatric Hemato-oncologist at Memorial Sloan Kettering Cancer Center, New York, United States
- Member of the Scientific Advisory Board of Emendo Biotherapeutics
- Managing Partner of New World Health, LLC
- Observer on the Board of BioTrace Medical Inc.
- Pediatrician specializing in Hemato-oncology at the Children's Hospital of Philadelphia
- PhD in Medicine at the NYU School of Medicine
- Fellowship in Pediatric Hemato-Oncology at the Children's Hospital of Philadelphia
- Internship in pediatrics at New York-Presbyterian/Weill Cornell Medical College



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

## Guest Director



### Dr. Martínez López, Joaquín

- ♦ Head of the Hematology Department of the 12 de Octubre University Hospital
- ♦ President of Altum Sequencing
- ♦ Director of the Translational Research Group and the Early Clinical Trials Unit in Hematology at the 12 de Octubre University Hospital
- ♦ Director of the CRIS Foundation against Cancer
- ♦ PhD in Medicine from the Complutense University of Madrid.
- ♦ Degree in Medicine from the University of Granada
- ♦ Practical Stay in Cell Therapy at the University of Toronto

## Professors

### Dr. Rodríguez Rodríguez, Mario

- ♦ Specialist in Thrombophilia and Hemostasis at the 12 de Octubre University Hospital
- ♦ Specialist in Thrombophilia and Hemostasis and in the Basic and Special Coagulation Laboratory at the 12 de Octubre University Hospital
- ♦ Participation in quality work for ENAC accreditation in the coagulation laboratory at the 12 de Octubre University Hospital
- ♦ Graduate in Medicine and Surgery from the Complutense University of Madrid
- ♦ Specialty in Hematology and Hemotherapy at the 12 de Octubre University Hospital

### Dr. Sánchez Pina, José María

- ♦ Specialist in Hospitalization and Hematopoietic Transplantation at the 12 de Octubre University Hospital
- ♦ Member of the Cell Therapy Group at the 12 de Octubre University Hospital
- ♦ Degree in Medicine from the University of Alcalá
- ♦ Specialty in Hematology and Hemotherapy at the 12 de Octubre University Hospital
- ♦ Master's Degree in Hematopoietic Transplantation 4th Edition by the University of Valencia



**Dr. Carreño Gómez-Tarragona, Gonzalo**

- ◆ Hematology and Hemotherapy Service of the 12 de Octubre University Hospital
- ◆ Researcher Specializing in Molecular Etiopathogenesis of Hematological Neoplasms
- ◆ Degree in Medicine from the Autonomous University Madrid.
- ◆ Master's Degree in Hematopoietic Transplantation from the University of Valencia
- ◆ Member of the Clinical Research Ethics Committee of the 12 de Octubre University Hospital

**Dr. Paciello Coronel, María Liz**

- ◆ Specialty in Hematology and Hemotherapy at the 12 de Octubre University Hospital
- ◆ Hematology resident tutor at 12 de Octubre Hospital
- ◆ Collaborator in clinical trials as principal investigator and sub-investigator
- ◆ Graduated in Medicine and Surgery from UNA
- ◆ Specialty in Hematology and Hemotherapy at La Fe University Hospital

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*A unique, key, and decisive educational experience to boost your professional development”*

# 04

## Structure and Content

The teaching program has been created by a group of professors and medical professionals from various specialties, with extensive medical, research, and teaching experience in several countries in Africa, Central and South America, interested in integrating the latest and most current scientific knowledge in hematology and hemotherapy to ensure training and professional development to improve the daily clinical practice of professionals.



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*We have the most complete and up-to-date scientific program on the market. We strive for excellence and for you to achieve it too"*

## Module 1. Update on Coagulation, Thrombosis, and Fibrinolysis Tests

- 1.1. Primary and Secondary Hemostasis Evaluation Tests
  - 1.1.1. Tests to Assess the Role of the Vascular Endothelium
  - 1.1.2. Tests to Assess the Role of Platelets in Hemostasis
  - 1.1.3. Tests that Assess the Role of Coagulation Factors in the Enzymatic Cascade
- 1.2. Interpretation of Prothrombin, Thrombin, and Activated Thromboplastin Times
  - 1.2.1. Prothrombin Time Interpretation
  - 1.2.2. Thrombin Time Interpretation
  - 1.2.3. Interpretation of Activated Thromboplastin Time
- 1.3. Usefulness of Thromboelastography: Its Current Role
  - 1.3.1. Definition
  - 1.3.2. Use
  - 1.3.3. Interpretation
- 1.4. Fibrinolysis Tests: The Mediators of Tissue Reperfusion
  - 1.4.1. Tests that Assess Fibrinolysis
  - 1.4.2. Uses
  - 1.4.3. Interpretation
- 1.5. Diagnosis of Hemophilia: Traditional and the Latest Techniques
  - 1.5.1. Types of Hemophilia
  - 1.5.2. Tests to Diagnose Hemophilia
- 1.6. Monitoring Coagulation in Patients with Critical Bleeding Disorders
  - 1.6.1. Hemostasis in Critically Ill Patients
  - 1.6.2. Tests for Monitoring Bleeding Disorders in Critically Ill Patients
- 1.7. Laboratory Monitoring of Patients on Oral Anticoagulants
  - 1.7.1. Traditional and New Oral Anticoagulants
  - 1.7.2. Evidence for Monitoring Patients on Direct Oral Anticoagulants
- 1.8. Laboratory Monitoring in Patients Treated with Heparins
  - 1.8.1. Heparins in Anticoagulant Treatment
  - 1.8.2. Tests for Monitoring Heparin Treatment





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*Take the opportunity to learn about the latest advances in this field in order to apply it to your daily practice"*

# 05 Methodology

This 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 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.

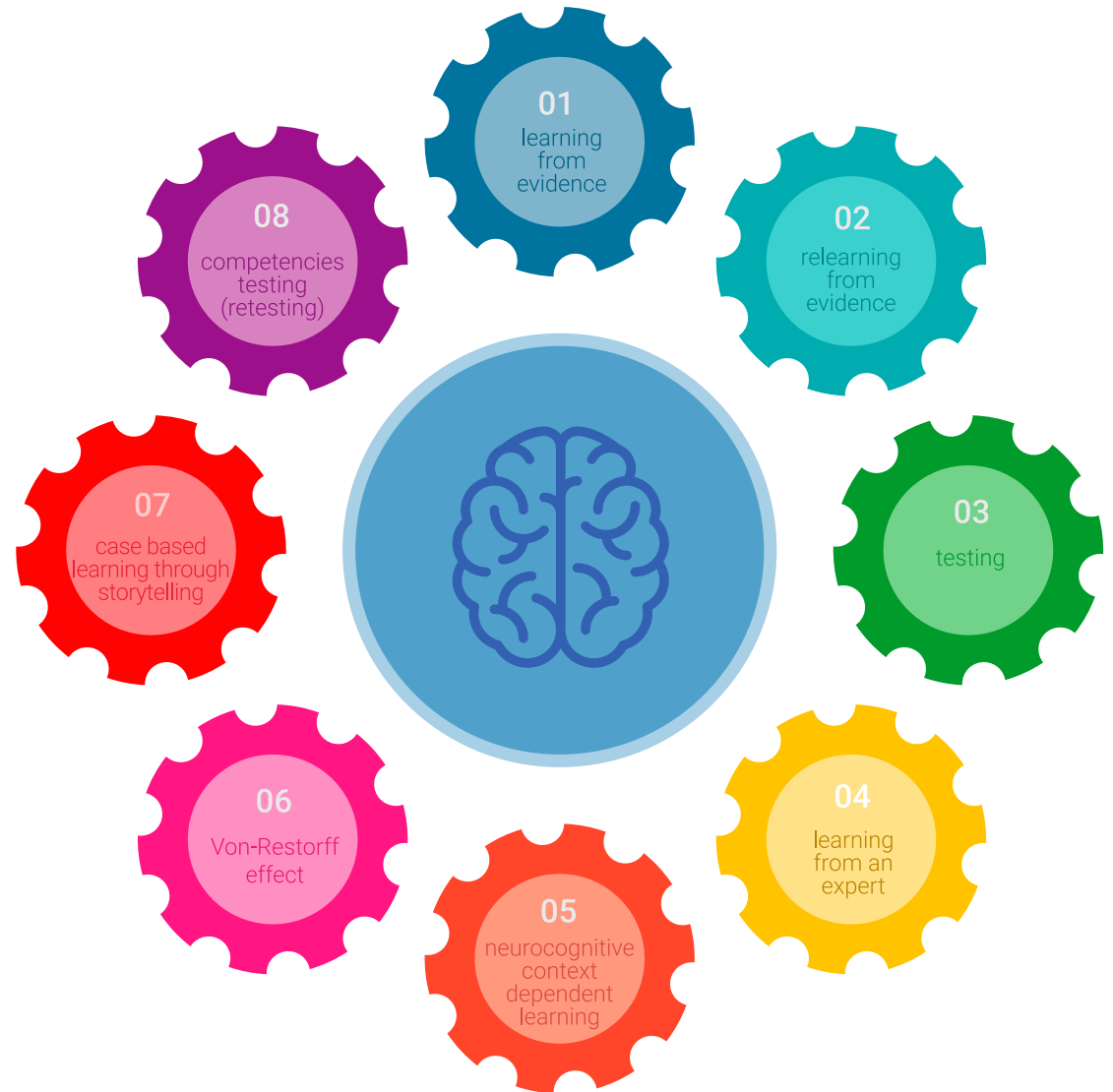


## Relearning Methodology

TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

*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 prepared with unprecedented success in all clinical specialties regardless of surgical load. Our educational 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 adapted in 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 assess and re-assess 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

This Postgraduate Certificate in Update on Coagulation, Thrombosis and Fibrinolysis Tests guarantees you, 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 a **Postgraduate Certificate in Update on Coagulation, Thrombosis and Fibrinolysis Tests** 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 Update on Coagulation, Thrombosis and Fibrinolysis Tests**

ECTS: **5**

Official N° of Hours: **125 hours**.



\*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.





## Postgraduate Certificate Update on Coagulation, Thrombosis and Fibrinolysis Tests

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