

Postgraduate Certificate

Echocardiography in the Cardiovascular Critical Patient



Postgraduate Certificate Echocardiography in the Cardiovascular Critical Patient

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 7 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtitude.com/us/medicine/postgraduate-certificate/echocardiography-cardiovascular-critical-patient

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 16

05

Study Methodology

p. 20

06

Certificate

p. 30

01

Introduction

The specialty of Echocardiography in the Cardiovascular Critical Patient has been one of the most overlooked areas in recent years due to its difficult access via the MIR (Resident Medical Intern) program, where it has not been accepted for years. However, it has remained essential, particularly in the judicial field following recent legislative changes.



“

Enhance your knowledge in Echocardiography in the Cardiovascular Critical Patient through this program, where you will find the best educational materials with real clinical case studies. Learn about the latest advances in the specialty to be able to provide quality medical care”

This Postgraduate Certificate in Echocardiography in the Cardiovascular Critical Patient, in the field of cardiology, is one of the areas of intense research activity, which leads to the frequent emergence of new studies, reviews, clinical practice guidelines, etc., that modify or should modify the management of patients with acute heart disease.

Gaining up-to-date knowledge in this area is essential for cardiologists interested in developing specific skills; for cardiologists who aren't in daily contact with acute cardiac patients, but who need to be competent in dealing with them, or for non-cardiologists who work in an environment where they treat these types of patients.

The Postgraduate Certificate meets the needs of professionals who demand adequate knowledge to enable them to carry out forensic assessments and expert reports, as well as the ability and fluency to ratify their opinion and understand the stages of the legal proceedings when necessary. At the same time, it offers the possibility for all students to learn how to assess not only bodily injury, but also to quantify negligence, assess disability, and determine disabilities.

Currently, law firms and private clients require a forensic expert examination for most of their procedures. It is for this reason, in addition to the lack of existing professionals, that we consider it appropriate to implement a correct, up-to-date, and especially useful syllabus for the daily practice of this activity.

The Postgraduate Certificate is divided into specific blocks that also coincide with the syllabus taught to those who wish to access Forensic Physician positions offered by the Ministry of Justice. This highlights the quality and scope of the content provided in the course.

This **Postgraduate Certificate in Echocardiography in the Cardiovascular Critical Patient** contains the most complete and up-to-date scientific program on the market.

The most important features include:

- ♦ The development of over 75 clinical cases presented by experts in Echocardiography in the Cardiovascular Critical Patient
- ♦ The graphic, schematic, and practical contents of which they are composed provide scientific and practical information on the disciplines that are essential for professional practice
- ♦ The latest diagnostic and therapeutic updates on evaluation, diagnosis, and intervention in Echocardiography in the Cardiovascular Critical Patient
- ♦ It contains practical exercises where the self-evaluation process can be carried out to improve learning
- ♦ Algorithm-based interactive learning system for decision-making in the presented clinical situations
- ♦ The program places a special emphasis on evidence-based medicine and research methodologies in the field of Echocardiography in the Cardiovascular Critical Patient
- ♦ All this will be complemented by 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



Update your knowledge through the Postgraduate Certificate in Echocardiography in the Cardiovascular Critical Patient"

“

This Postgraduate Certificate could be the best investment you can make when selecting a professional development program for two reasons: in addition to updating your knowledge in Echocardiography in the Cardiovascular Critical Patient, you will receive certification issued by TECH Global University”

Increase your decision-making confidence by updating your knowledge through this Postgraduate Certificate.

Take advantage of the opportunity to learn about the latest advancements in Echocardiography in the Cardiovascular Critical Patient, and enhance the training of your students.

The program includes faculty members who are professionals in the field, bringing their work experience into the course, as well as renowned specialists from leading societies and prestigious universities.

Thanks to its multimedia content, developed with the latest educational technology, professionals will benefit from situated and contextual learning—simulated environments designed to provide immersive learning experiences that prepare them for real-life situations.

The design of this program is based on problem-based learning, by means of which the educator must try to solve the different professional practice situations that arise throughout the University Course. To support students, the program offers a novel interactive video system created by recognized experts in the field of Echocardiography in the Cardiovascular Critical Patient with extensive teaching experience.



02 Objectives

The Postgraduate Certificate in Echocardiography in the Cardiovascular Critical Patient is designed to support doctors in managing all types of patients at risk of severe toxicity or acute poisoning.



“

This Postgraduate Certificate is aimed at updating your knowledge in Echocardiography in the Cardiovascular Critical Patient, using the latest educational technology, to contribute to high-quality and safe decision-making with your patients”



General Objectives

- Handle with ease the diagnostic arsenal available in a tertiary center for the management of critically ill cardiovascular patients
- Identify patients in a serious or potentially serious short-term situation due to cardiovascular problems
- Explain the treatment indications and the therapy options in critical cardiovascular patients
- Lead a group attending to urgent or emergency situations caused by acute cardiovascular problems and guide fellow colleagues in the treatment of critical patients





Specific Objectives

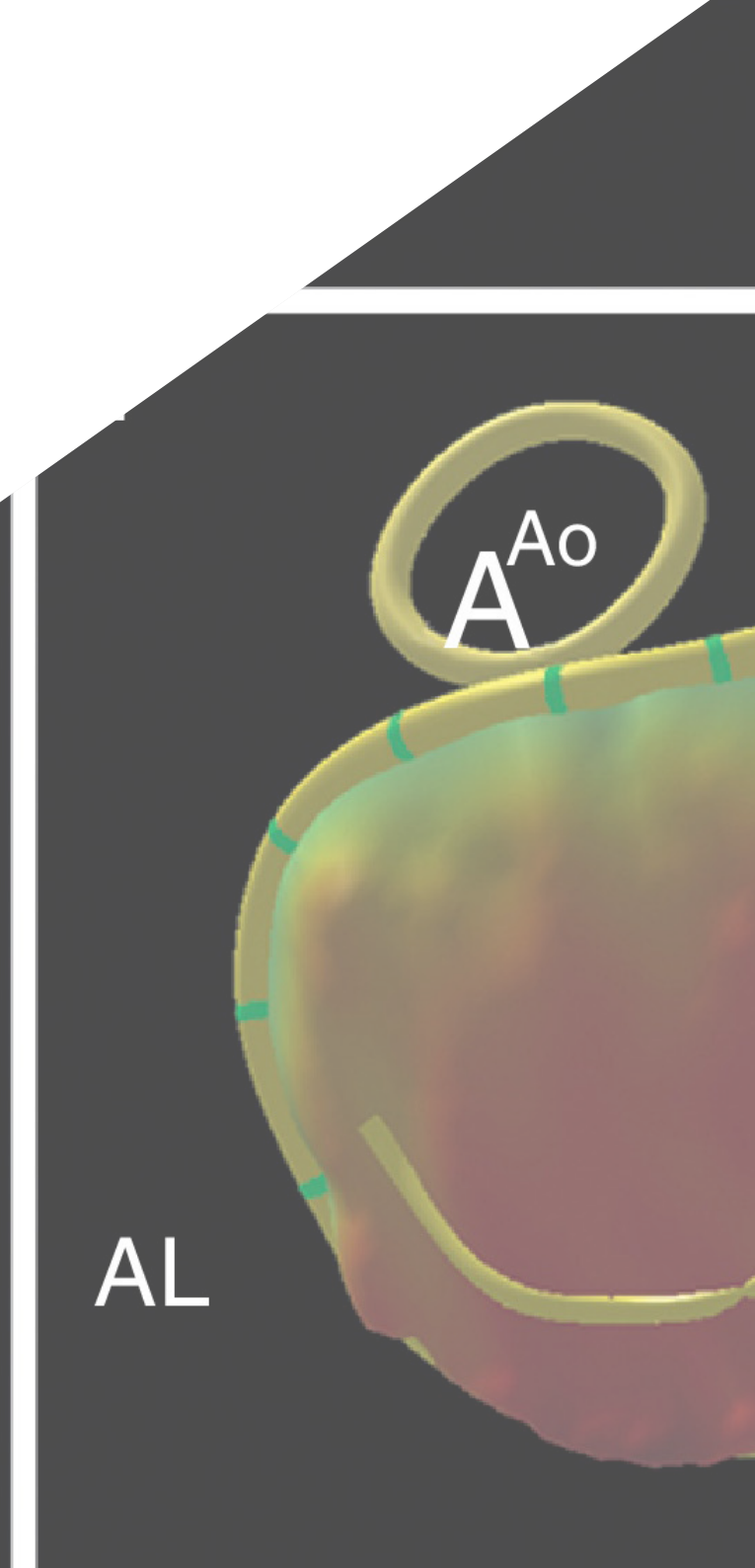
- ♦ Describe the echocardiographic planes and the structures to be visualized in each of them
- ♦ Explain the hemodynamic calculations that can be performed using Doppler echocardiographic technology and their importance in the cardiovascular critical patient
- ♦ Identify the most common expected findings in an echocardiogram of a surgical patient or a patient undergoing structural or coronary interventions
- ♦ Identify acute complications in patients with acute myocardial infarction

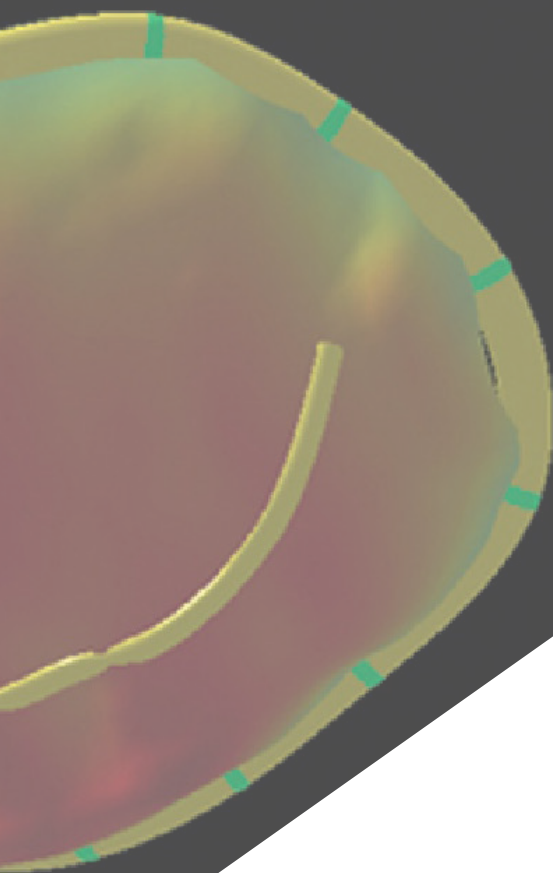
Update your knowledge through the program in Echocardiography in the Cardiovascular Critical Patient.

03

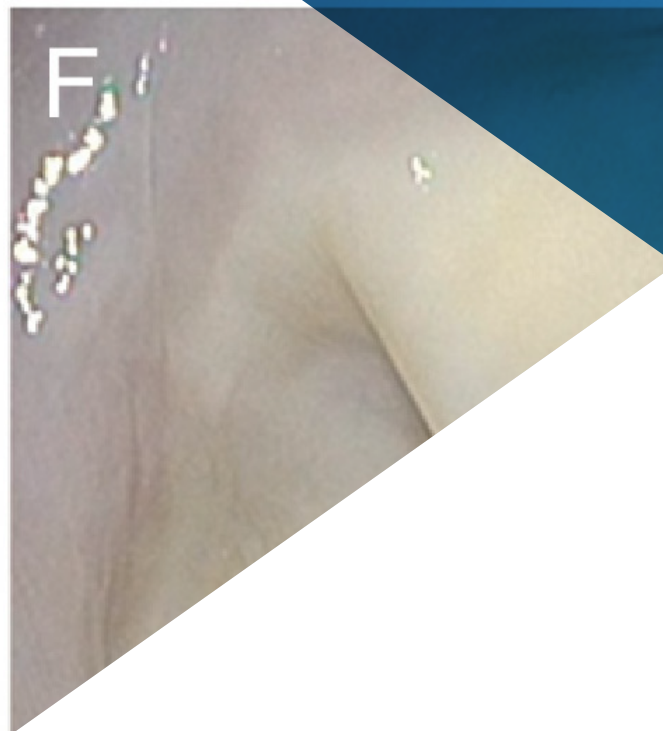
Course Management

The program includes a faculty of reference specialists in Echocardiography in the Cardiovascular Critical Patient, who bring their professional experience to this training. In addition, other specialists of recognized prestige participate in its design and elaboration, completing the program in an interdisciplinary manner.





PM



“

Learn from leading professionals about the latest advancements in procedures in the field of Echocardiography in the Cardiovascular Critical Patient”

Management



Dr. Rodríguez Muñoz, Daniel

- Specialist Cardiologist in Electrophysiology and Arrhythmias at Ramón y Cajal University Hospital
- PhD in Health Sciences, University of Alcalá
- Master's Degree in Pacemakers, Defibrillators and Resynchronization
- Master's Degree in Medical Education
- Master's Degree in Diagnostic and Therapeutic Cardiac Electrophysiology
- Fellow of the European Society of Cardiology (FESC)
- Member of the European Heart Rhythmia Association (EHRA)
- Member of the Spanish Society of Cardiology (SEC)
- Member of the Arrhythmia and Electrophysiology Section of the SEC



Dr. Zamorano Gómez, José Luis

- ♦ Head of the Cardiology Services. Ramón y Cajal University Hospital. Madrid
- ♦ Doctor of Medicine- Cum Laude
- ♦ Executive Management and Health Resources (ESADE, Madrid)
- ♦ National Qualification Professor of Medicine
- ♦ Member of the First European Echocardiography Accreditation Committee of the European Association of Echocardiography
- ♦ Honorary Fellow American Society of Echocardiography
- ♦ Chairman of the Clinical Guidelines Committee of the European Society of Cardiology
- ♦ Chairman National Cardiovascular Panel FIS, Instituto Carlos III
- ♦ Member of the Editorial Board of the Spanish Society of Cardiology Journal
- ♦ Member of the Editorial Board of the Journal of Echocardiography
- ♦ Member of the Editorial Board of the American Society of Echocardiography
- ♦ Member of International Relations Task Force of the American Society of Echocardiography
- ♦ Associate Editor of the European Heart Journal Cardiovascular Imaging
- ♦ Author of more than 20 books, more than 500 articles in scientific journals and more than 400 communication in National and International Conferences
- ♦ Impact Factor > 1500. IH 84. Citations > 40000

Faculty

Dr. Castillo Orive, Miguel

- Cardiology Specialist in the Hospitalization Unit and Cardio-Diabetes Unit at the Ramón y Cajal University Hospital

Dr. Sanmartín Fernández, Marcelo

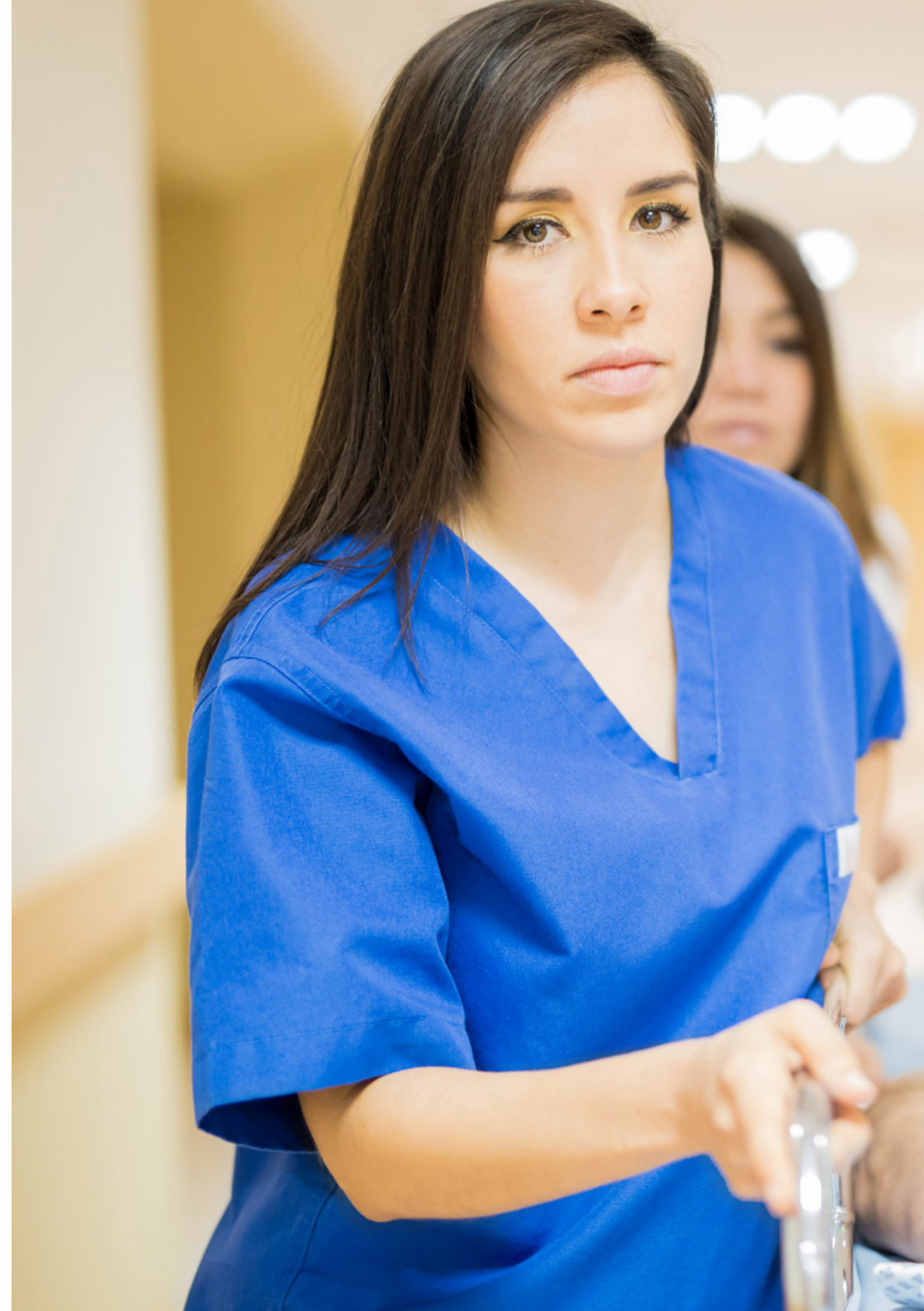
- Head of Acute Coronary Syndrome Section, Ramon and Cajal University Hospital, Madrid

Dr. Sionis Green, Alessandro

- Director of the Cardiac Intensive Care Unit, Cardiology Department, La Santa Creu and Sant Pau Hospital Barcelona

Dr. Fernández-Golfín Lobán, Covadonga

- Coordinator of the Cardiac Imaging Unit, Ramon y Cajal University Hospital. Madrid



“

Our teaching team will provide you with all their knowledge so that you are up to date with the latest information on the subject”

04

Structure and Content

The structure of the content has been designed by a team of professionals from the best educational institutions, universities, and leading companies in the country, all aware of the importance of current training to effectively intervene in the education and support of students, and committed to delivering high-quality teaching through the use of new educational technologies.



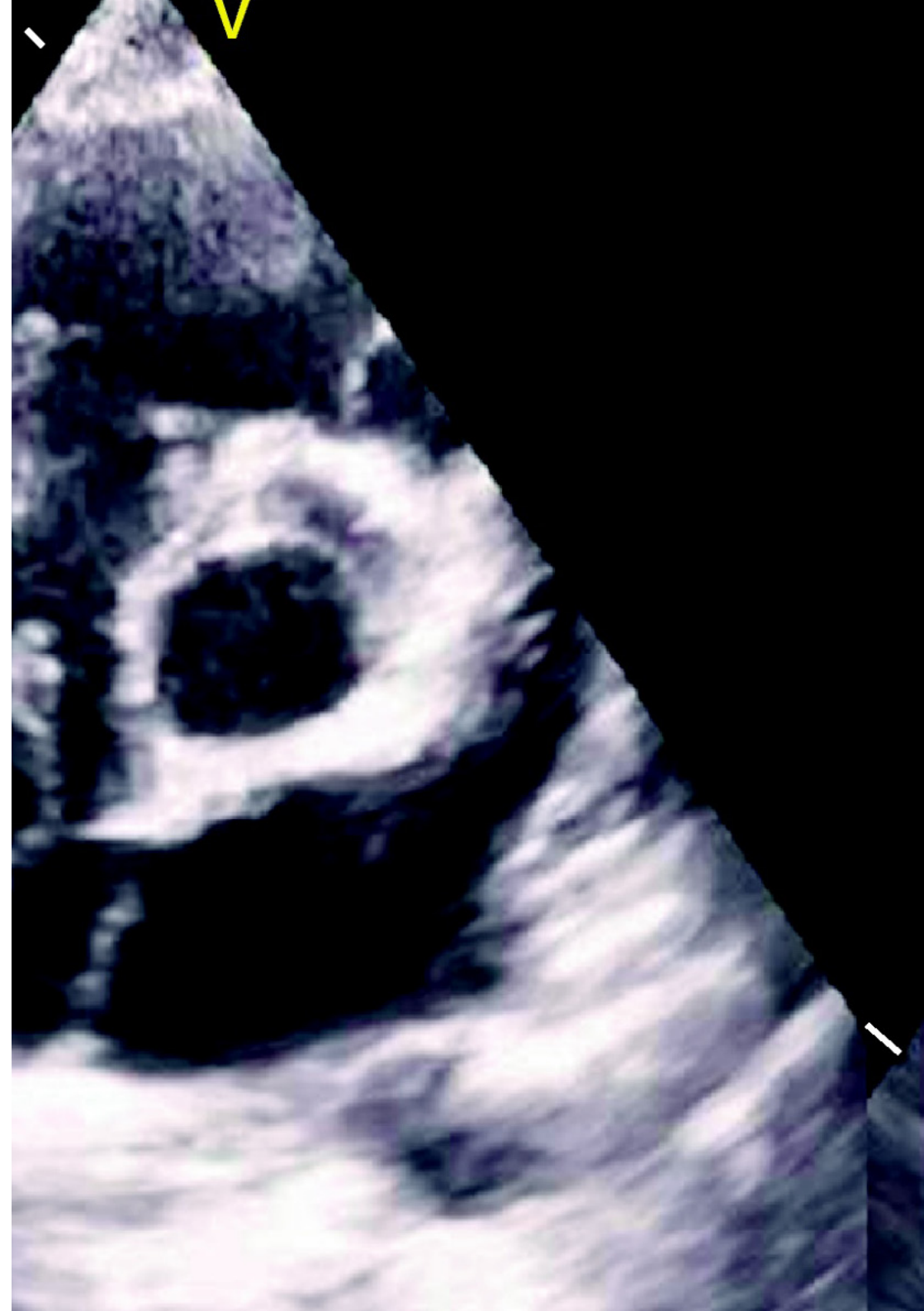


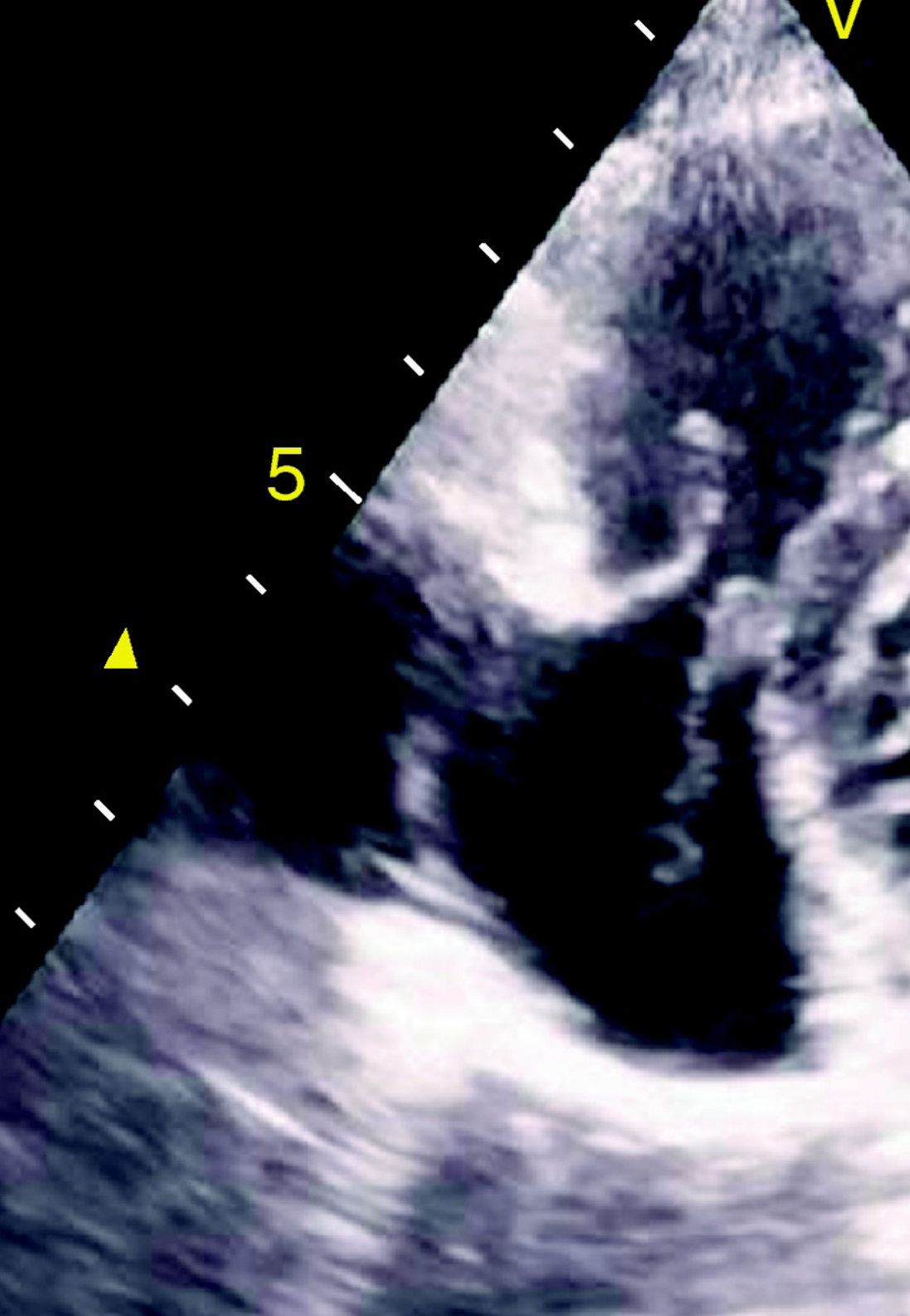
“

This Postgraduate Certificate in Echocardiography in the Cardiovascular Critical Patient contains the most complete and up-to-date scientific program on the market”

Module 1. Echocardiography in the Cardiovascular Critical Patient

- 1.1. Basic Echocardiographic Skills
 - 1.1.1. Echocardiographic Planes
 - 1.1.2. Limitations in the Acute Context
 - 1.1.3. Hemodynamic Calculations
- 1.2. Special Situations
 - 1.2.1. Targeted Echocardiography in the Initial Assessment of the Patient
 - 1.2.2. The Patient in Shock and Echocardiography as a Diagnostic Tool
 - 1.2.3. Echocardiography in the Hemodynamics Laboratory
 - 1.2.4. Echocardiography in the Operating Room for Cardiac Surgery
 - 1.2.5. Acute Complications in Myocardial Infarction





“

*A unique, essential and decisive
learning experience to boost your
professional development”*

05 Study Methodology

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

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



“

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

The student: the priority of all TECH programs

In TECH's study methodology, the student is the main protagonist.

The teaching tools of each program have been selected taking into account the demands of time, availability and academic rigor that, today, not only students demand but also the most competitive positions in the market.

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

“

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



The most comprehensive study plans at the international level

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

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

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

“

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

Case Studies and Case Method

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

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

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



Relearning Methodology

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

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

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

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



A 100% online Virtual Campus with the best teaching resources

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

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

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

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



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

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

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

The university methodology top-rated by its students

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

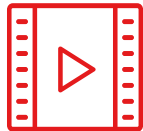
The students' assessment of the teaching quality, the quality of the materials, the structure of the program and its objectives is excellent. Not surprisingly, the institution became the top-rated university by its students according to the global score index, obtaining a 4.9 out of 5.

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

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



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



Study Material

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

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



Practicing Skills and Abilities

You will carry out activities to develop specific competencies and skills in each thematic field. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop within the framework of the globalization we live in.



Interactive Summaries

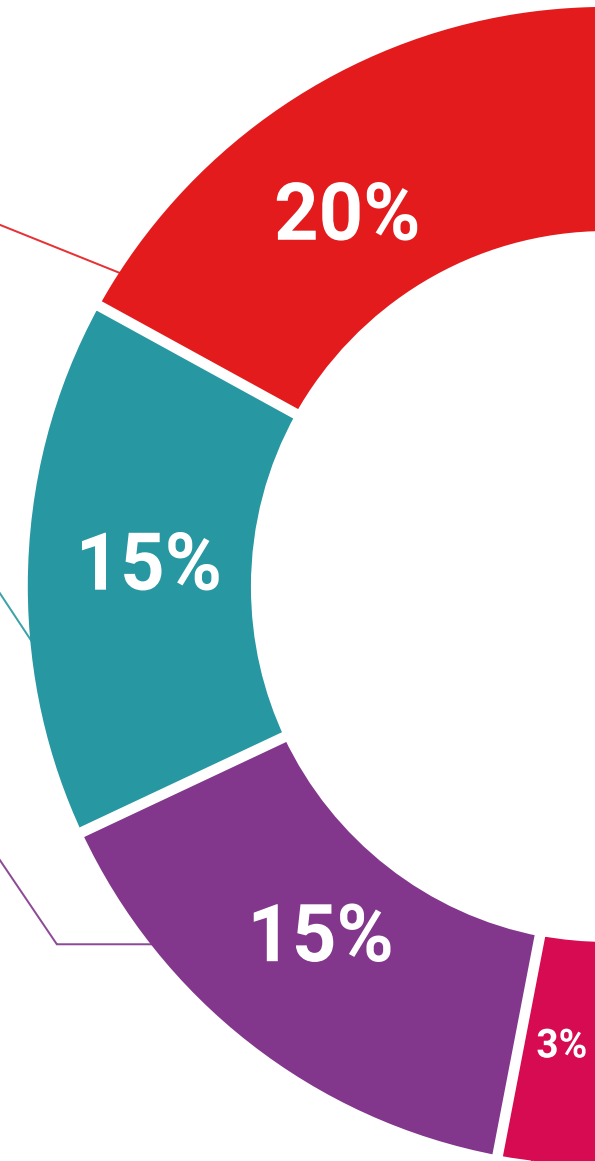
We present the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

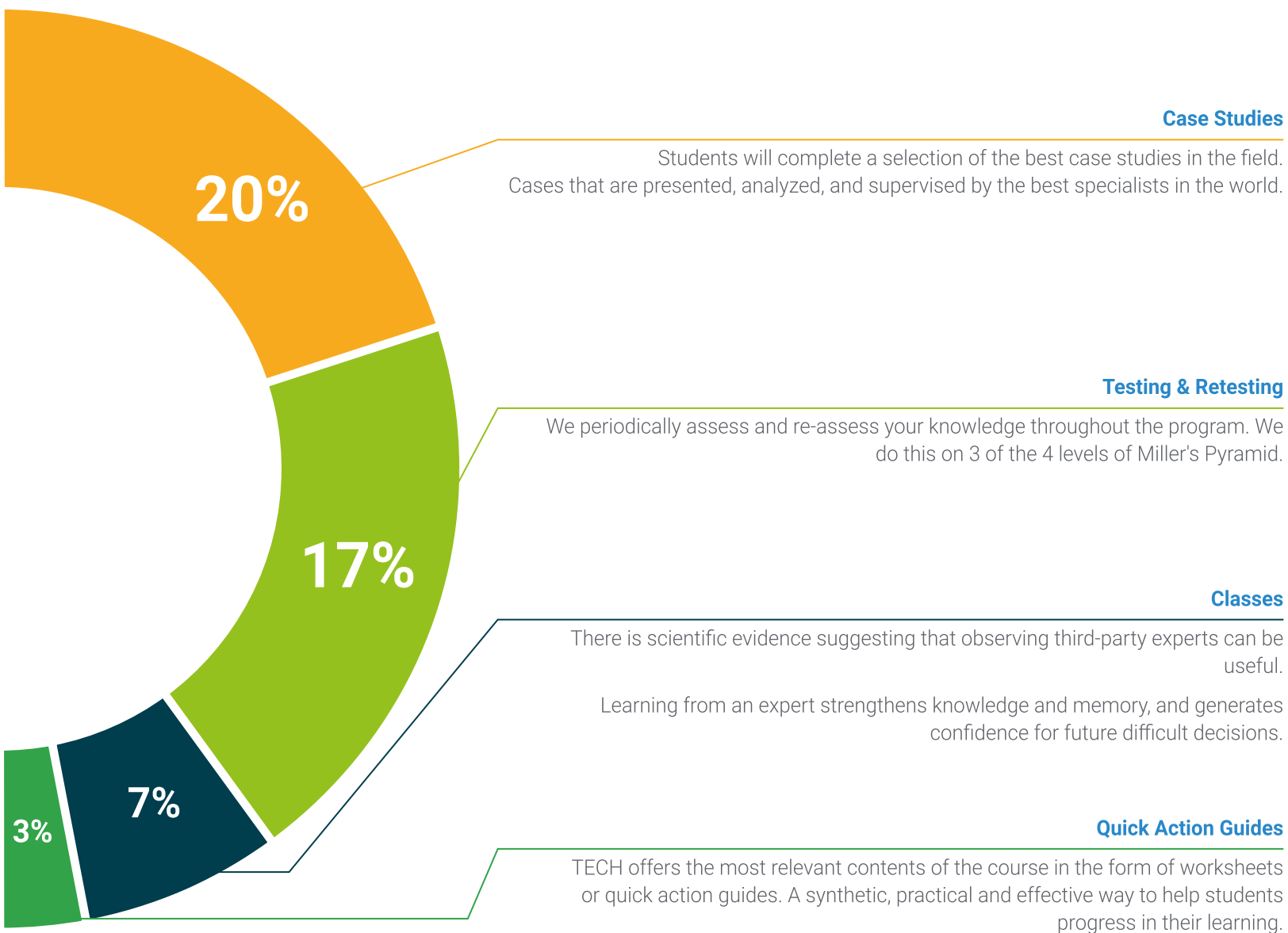
This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



Additional Reading

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





06 Certificate

The Postgraduate Certificate in Echocardiography in the Cardiovascular Critical Patient guarantees students, in addition to the most rigorous and up-to-date education, access to a diploma for the Postgraduate Certificate issued by TECH Global University



“

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

This private qualification will allow you to obtain a diploma for the **Postgraduate Certificate in Echocardiography in the Cardiovascular Critical Patient** endorsed by TECH Global University, the world's largest online university.

TECH Global University, is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

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

Title: **Postgraduate Certificate in Echocardiography in the Cardiovascular Critical Patient**

Modality: **online**

Duration: **6 weeks**

Accreditation: **7 ECTS**





Postgraduate Certificate
Echocardiography in
the Cardiovascular
Critical Patient

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Accreditation: 7 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate

Echocardiography in the Cardiovascular Critical Patient

