





21 e 22 de novembro 2025

Centro de Simulação





SPEAKERS

Coordinator: Filipe Gonzalez | Intensive Care and Internal Medicine | EDEC supervisor

Ana Rita Varudo | Intensive Care | EDEC trainnee

António Tralhão | Intensive Care and Cardiology | EACVI certificate

Doroteia Silva | Intensive Care and Cardiology | EACVI certificate

Jacobo Bacariza | Intensive Care and Internal Medicine | EDEC trainnee

João Leote | Intensive Care | Cardiac ultrasound technician

Pedro Costa | Intensive Care and Internal Medicine | EDEC certificate

COURSE MANAGER

Sofia Fraga









BRIEF COURSE PRESENTATION

EchoCrit level II is an echocardiography course aimed at anyone who wants to acquire advanced tools to manage the critically ill. From the operating and emergency room to the intensive care unit, from diagnosis to hemodynamic monitoring, it covers all topics for those taking a step forward in echocardiography in the management of critically ill patients.

The course is born from the desire for synergies between the Portuguese Society of Intensive Care (SPCI) and the CUF Academy. It is specially designed for those undergoing training in specific stages of echocardiography, whether in intensive care, anesthesiology, cardiology, or any other specialty with an interest in echocardiography as an advanced clinical decision aid.

COURSE HIGHLIGHTS

- Advanced Echocardiography Focus: Echocardiography course aimed at acquiring advanced tools for managing critically ill patients, covering topics from diagnosis to hemodynamic monitoring.
- **Multidisciplinary Relevance:** Designed for those in intensive care, anesthesiology, cardiology, and other specialties using echocardiography for advanced clinical decision-making.
- Interactive Learning: 2-day duration with interactive clinical case scenarios modules and hands-on sessions.
- **Simulation-Based Training:** Utilizes a simulation center equipped with a TEE mannequin featuring normal and pathological scenarios.
- **Pedagogic Approach:** Emphasizes interactive learning, combining in-depth lectures with case-based discussions, practical demonstrations, and critical analysis of real-world echo images and videos.
- **Synergy between Societies:** Born from the desire for synergies between the Portuguese Society of Intensive Care (SPCI) and the CUF Academy.









PROGRAMME

DAY 21

14h00 Hands on | 4 groups of 5 Registration C+D | TEE simulator - views Basic vs Advanced EchoCrit D+C | Lung ultrasound A+B | LV diastolic function **TEE views** B+A | Vexus LV diastolic function 16h00 Coffee break 10h00 Vexus 16h30 Prosthetic valves **Lung ultrasound** Cardiogenic shock - AMI and 10h40 Coffee break cardiomyopathies **Hands on** | 4 groups of 5 **Obstructed Heart - Atypical tamponade,** A+B | TEE simulator - views **Constrictive pericarditis, DOLVOT** B+A | Lung ultrasound Intracardiac device infections and C+D | LV diastolic function systemic embolism D+C Vexus End of the 1st day 18h30 13h00 Lunch









DAY 22

Diaphragm Ventilatory weaning failure Inexplained sustained hypoxia & shunts **Speckle tracking** 10h00 Cardiac trauma and Acute aortic 10h20 **syndromes** 10h40 Coffee break **Hands on** | 4 groups of 5 11h00 A+B | Intracardiac shunts and systemic embolism **B+A** | **Ventilatory weaning failure** C+D | Speckle tracking D+C | ECMO and Impella case scenarios

14h00 Hands on | 4 groups of 5

C+D | Intracardiac shunts and systemic embolism
D+C | Ventilatory weaning failure
A+B | Speckle tracking
B+A | ECMO and Impella case scenarios

16h00 Coffee break

16h30 Bring your own clinical case

18h00 Final considerations and satisfaction survey

18h30 Course closure



13h00 Lunch







GENERAL LEARNING OBJECTIVES

- To acquire advanced tools for managing critically ill patients using echocardiography.
- To understand the nuances of when and how to perform Basic vs. Advanced Echo.
- To master TEE Views for complex cardiac assessments in critically ill patients.
- To gain an in-depth understanding of LV Diastolic Function and its implications.
- To apply VEXUS for assessing systemic venous congestion and guiding fluid management.
- To perform Lung Ultrasound for rapid diagnosis of respiratory conditions.
- To assess Prosthetic Valves and their potential complications.
- To conduct comprehensive echo assessment in Cardiogenic Shock.
- $\bullet\,$ To diagnose Obstructed Heart conditions.
- To evaluate Diaphragm function and identify causes of Ventilatory Weaning Failure.

- To investigate Unexplained Sustained Hypoxia & Shunts.
- To understand the basics of Speckle Tracking.
- To rapidly assess Cardiac Trauma and Acute Aortic Syndromes.
- To diagnose Intracardiac Device Infections and Systemic Embolism.
- To integrate echo for device optimization and complication detection in ECMO and Impella cases.
- To foster a deep understanding of underlying physiology and clinical application, moving beyond image acquisition to true diagnostic and therapeutic integration.









DURATION

- 2 days
 - Interactive clinical case scenarios modules
 - Hands-on sessions in a simulation center

COURSE REGISTRATION FEES

The registration is considered completed when the full registration amount is received by the CUF Academic Center.

FOR MORE INFORMATION

In case of doubts or need for additional information, please e-mail us at: centrodesimulacao@cuf.pt

SCIENTIFIC ENDORSEMENTS













TARGET AUDIENCE

- Anyone who wants to acquire advanced tools to manage the critically ill.
- Professionals in intensive care, anesthesiology, cardiology, or any other specialty with an interest in echocardiography as an advanced clinical decision aid.
- Those undergoing training in specific stages of echocardiography.

ASSESSMENT METHODS

 Continuous evaluation during hands-on sessions and final theoretical examination.

ATTENDANCE REQUIREMENTS

- Basic echocardiographic training skills
- Basic or Level I echocardiography course (priority for who completed Echo Crit level I)





