PORTO CCTLevel 1 Course

ACADEMIA CARDIOVASCULAR Sociedade Portuguesa de CARDIOLOGIA







Duration - 28 hours

Director: Nuno Bettencourt, MD, PhD, FESC, FACC, FSCMR, FSCCT

Training Program & Institution

Cardiovascular R&D Unit - Faculty of Medicine, University of Porto Cardiovascular Academy - Portuguese Society of Cardiology

Trainees

Cardiologists; Radiologists; Cardiologists in training; Radiologists in training; Radiographers

Objectives

To provide high quality and clinically relevant CCTA level I training (introductory training for familiarity with CCT) – working as a complement to a mandatory ≥4-week period of dedicated fellowship.

This training provides appropriate basic background in CCT for clinical practice in cardiology or general radiology – and focus in important clinical components, namely appropriate indications, limitations, patient preparation, scan-acquisition and post-processing.

Course Type Mixed Course:

- Didactic educational sessions
- Practice-based analyzing and interpreting CCTA studies
- Practice-based, performing live CCTA studies

Local

North Delegation: Portuguese Society of Cardiology Gaia Hospital Centre & Hospital Lusíadas Porto

Number of vacancies: 24



Day 1 | 16th of October 2025

08h00 - Registration & Welcome

08h30 - Introduction to the course: Learning objectives/evaluation

Nuno Bettencourt

08h40 - MDCT: Basic principles & technical developments

Ana Marta Pinheiro

09h10 - Radiation in Cardiac CT

Ricardo Ladeiras Lopes

09h40 - Contrast media in Cardiac CT

Miguel Correia

10h00 - Indications for Cardiac CT

Luís Oliveira

10h20 - Coffee-break

10h50 - Topographic cardiac & coronary anatomy

Ana Almeida

11h10 - Patient preparation. Medication in Cardiac CT

Ana Faustino

11h30 - Acquisition protocols. Optimization

Mónica Carvalho

11h50 - Calcium Score

Pedro Matos

12h10 - Coronary angiography

António Miguel Ferreira

12h30 - Lunch

14h30 - 19h00 - Pratical Sessions / Hands-on

Grupo A: Performing live CCTA studies

Protocols of acquisition and reconstruction

Expert mentoring in patient selection, patient preparation, scan planning and acquisition, data set reconstruction and scan interpretation (2 groups of 6 trainees)

- a) ULSG/E Nuno Ferreira, Rita Faria, Mariana Silva, Ana Pimentel, Mónica Carvalho.
- b) Hospital Lusíadas Porto Nuno Bettencourt, Américo Santos, Gisela Sousa

Grupo B: Analyzing and interpreting CCTA studies. Post-processing

Hands-on workstation experience: 1-2 participants per workstation (rotation of 4 groups of 3 trainees)

- 1. Tool-box overview & Calcium Scoring António Ferreira / Pedro Matos
- 2. Native coronary angiography Catarina Ferreira / Miguel Correia
- 3. Coronary stents & bypass grafts evaluation Adriana Pereira / Luís Oliveira
- 4. Aorta; TAVI & Structural intervention planning Mariana Vasconcelos / Luís Puga



Day 2 – 17th of October 2025

08h00 - Overview of Day 1

08h30 - Feedback forms. Groups distribution

Nuno Bettencourt

08h40 - Visualization & Post-processing

Adriana Pereira

09h00 - Quantification of volumes & function evaluation.

Ana Almeida

09h20 - Valve Evaluation, TAVI

Nuno Ferreira

09h50 - MDCT in AF: LAA closure & P.V. ablation

Rita Faria

10h10 - Aorta, TEVAR

Rita Faria

10h30 - Coffee-break

11h10 - Extra-cardiac findings

Raquel Themudo

11h30 - New developments: Perfusion, FFR-CT, ...

Mariana Silva

11h50 - Interpretation & reporting

Catarina Ferreira

12h30 - Lunch

14h30 - 19h00 - Pratical Sessions / Hands-on

Grupo B: Analyzing and interpreting CCTA studies. Post-processing

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- 1. Tool-box overview & Calcium Scoring António Ferreira / Pedro Matos
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Grupo A: Performing live CCTA studies

Protocols of acquisition and reconstruction

Expert mentoring in patient selection, patient preparation, scan planning and acquisition, data set reconstruction and scan interpretation (2 groups of 6 trainees)

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- b) Hospital Lusíadas Porto Nuno Bettencourt, Américo Santos, Gisela Sousa



Day 3 – 18th of October 2025

08h00 - Overview of Day 2. Feedback forms. Software overview

08h30 - Tutorized Case Reading (I)

Ana Almeida; António Ferreira; Rita Faria; Ana Faustino; Adriana Pereira; Nuno Ferreira

Correlation with invasive coronary angiography

Hands-on workstation experience: 2 participants per workstation

10h30 - Coffee-break

11h00 - Tutorized Case Reading (II)

Catarina Ferreira; Mariana Vasconcelos; Mariana Silva; Pedro Matos; Raquel Themudo

Correlation with invasive coronary angiography

Hands-on workstation experience: 2 participants per workstation

12h30 - CCT Evaluation: self-test MCQs (30-45 min)

Answers and Discussions

Nuno Bettencourt; David Monteiro

14h00 - Course adjourn and evaluation

Participants must be present in all the course sessions and to fill the case-logbook in order to obtain the course certificate.

Limited to a maximum of 24 participants



Endorsed by the Society of Cardiovascular Computed Tomography, the professional society devoted exclusively to cardiovascular CT.

SCCT has no involvement with the organization or administration of this course. SCCT endorses this content as relevant and to benefit to the cardiovascular computed tomography community.



