17 th October-Thursday- Introduction to 3D and TOE	
Time	Session
08:00-09:00	Registration
09:00-09:10	Welcome and Introduction of the Course – Nurgül Keser, Navin C. Nanda
09:10-10:30	Session I: Basics of Transesophageal Echocardiography Chair: Lütfullah Orhan, Cihangir Kaymaz
09:10-09:40	Beginning to TOE: Sedation and Anesthesia, Probe Insertion Techniques, Instrument Controls, Instrument Manipulation- Gülay Gök
09:40-10:10	Standard Tomographic TOE views-Esophageal, Transgastric and Aortic- Alev Kılıçgedik
10:10-10:30	Physics and Image Optimization (Case based)- Mehmet Uzun
10:30-10:50	Coffee break
10:50-12:00	Session II: Basics of 3D Echocardiography Chair: Navin C. Nanda, Cevdet Erdöl
10:50-11:10	How 3D ultrasound works? Basic principles. Which patients would benefit from 3D TTE in day-to-day clinical practice- Navin C. Nanda
11:10-11:30	How 3D images are created? Acquisition of 3D datasets (modes and image settings, dealing with artefacts): TTE and TOE- Gökhan Kahveci
11:30-12:00	How 3D images are created? Post processing of 3D datasets (cropping, slicing): TTE and TOE- Navin C. Nanda
12:00-13:00	Lunch break
13:00-13:40	Session II: Basics of 3D (cont.) Chair:Nurgül Keser, Ertuğrul Okuyan
13:00-13:20	Assessing LV function with 3D (TTE)-Nihan Turhan Caglar
13:20-13:40	Assessing RV function with 3D (TTE)- Elif Eroğlu
13:40-14:00	Coffee Break

Session III: Parallel hands-on sessions

- Knobology and acquisition of LV using the matrix probe (on volunteer case) Philips-Alpay Sezer and Çiğdem Koca
- Knobology and acquisition of RV using the matrix probe (on volunteer case) Philips- Elif Eroğlu and Alev Kılıçgedik
- TOE simülatör- Mehmet Uzun and Gökhan Kahveci

Attendees will be divided into 3 groups:

14:00-17:00

Between 14:00-15:00; Group A will practice LV, Group B will practice RV and Group C will practice TOE.

Between 15:00-16:00; Group A will practice RV, Group B will practice TOE and Group C will practice RV.

Between 16:00-17:00; Group A will practice TOE, Group B will practice LV and Group C will practice LV.

18 th October-Friday -Advanced applications of 3D (TTE/TOE) and TOE

Time	Session
09:00-10:30	Session I: Specific structural imaging with TOE (2D and3D) Chair: Saide Aytekin, İlker Tekkeşin
09:00-09:30	Mitral valve anatomy and function assessment- Alpay Sezer
09:30-10:00	Aortic valve anatomy and function assessment-Çiğdem Koca
10.00-10:30	Tricuspid and pulmonary anatomy and function assessment-Elif Eroğlu
10:30-10:50	Coffee Break
10:50-12:30	Session I: Specific structural imaging with TOE (2D and3D) (cont.) Chair: Nurgül Keser, Lutfullah Orhan
10:50-11:10	Evaluation of pulmonary valve and right atrial structures by 3DTTE- Navin C.Nanda
11:10-11:30	Examination of valvular prostheses with 2D/3D TOE- Münevver Sarı
11:30-11:50	Examination of LA/LAA/Pulmonary Veins/RA/IVC/SVC-Özlem Yıldırımtürk
11:50-12:10	Endocarditis – Tuba Kemaloğlu Öz
12:10-12:30	Masses and sources of embolism- Sibel Enar
12:30-13:30	Lunch Break

13:30-17:00	Session II: Hands-on case studies of 3D TTE-TOE (pre-recorded cases on work sitations)-Philips
13:30-15:20	Chair: Navin C. Nanda, Şennur Ünal
13:30-14:00	LV and LA quantification (from pre-recorded 3D-TTE images)-Begüm Uygur
14:00-14:30	Mitral valve proplapse with regurgitation (orientation, cropping, MR quantification-VCA, MVQ)-Gamze Babür Güler
14:30-14:50	Mitral valve stenosis (orientation, cropping, slicing, measuring MVA-MPR)-Alev Kılıçgedik
14:50-15:20	Mitral valve prosthesis with perivalvular leak (Leak location, cropping, measuring defect size-MPR, MR quantification)-Gökhan Kahveci

15:20-15:40	Coffee break
15:40-17:00	Session II: Hands-on case studies of 3D TTE-TOE (pre-recorded cases on work sitations)-Philips- Cont.
	Chair: Navin C. Nanda, Nurgül Keser
15:40-16:00	Tricuspid and pulmonary valve (orientation, cropping, TR quantification-VCA)- Tuba Kemaloğlu Öz
16:00-16:20	Aortic valve stenosis (orientation, cropping, MPR for TAVI measurements, measuring LVOT Area-AVA)- Münevver Sarı
16:20-16:40	Aortic valve regurgitation (orientation, cropping, MPR, measuring VCA) -Çiğdem Koca
16:40-17:00	Atrial septal defect (orientation, cropping, location, sizing, MPR, deciding for interv.)- Ebru Özpelit

19th October- Saturday	Interventional 2D/3D TOE
Time	Session
08:30-09:30	Session I: Interventional 2D/3D TOE (Theoretical) Chair: Ahmet Turan Yılmaz, Lütfullah Orhan
08:30-09:00	Interatrial septum puncture (Case based) -Dual presentation- Alpay Sezer (Echo)Ahmet Taha Alper (Interv)- Mert İlker Hayıroğlu
09:00-09:30 09:30-09:50	Percutaneous Mitral Interventions (Case based) (Mitraclip/Closureof Paravalvular Leaks)- Navin C Nanda- LAA closure/imaging and interventional Şükrü Akyüz
09:50-12:20	Session II: Interventional 2D/3D TOE (Live-Case session) Chair: Mustafa Kemal Erol, Nihal Özdemir
09:50-10:50	ASD closure (Live case from Cath Lab)- Müslüm Şahin, Tufan Çınar, Muhammed Keskin Interventional Echo: Ebru Özpelit
10:50-11:10	Coffee break
11:10-12:15	Session II: Interventional 2D/3D TOE (Live-Case session) Cont. Chair: Navin C. Nanda, Cevat Kırma Perivalvular leak closure (Live case from Cath Lab) –Can Yücel Karabay, Mert İlker Hayıroğlu Interventional Echo: Gökhan Kahveci
12:15-13:00	Session III: Intraoperative 2D/3D TOE (Live-Case session from OR) Ahmet Turan Yılmaz (Surgeon) Intraoperative Echo: Mehmet Uzun- Emre Yalçınkaya
13.00-13.30	Closing remarks and future of Imaging: Navin C.Nanda, Nurgül Keser

19th October- Saturday	Interventional 2D/3D TOE
Time	Session