

Application training CT

Training Programme



This application CT training programme includes the basic CT technology curriculum, operation and use of the CT scanners possibilities and modern technologies, the instruments and technologies for patient dose adaptation and reduction, planning and adjusting of scanning protocols depending on patient type and scanned organ for optimum dose and image quality, image post processing technologies, image adjustment, reconstruction, and all software tools and applications for image processing.

At the end of the application training week – covering 40 hours of application training, a completed checklist of topics covered will be given to the trained specialists

Some additional topics may need to be shown in future follow up trainings as per the request of the users. This will be discussed as the training week progresses.

If at the end of the training week you would like a certificate of application training, please supply a list of names of the attendees and inform your application specialist. They will arrange the certificates to be forwarded on to you.

SYSTEM OVERVIEW **1**
AREA COVERED **2 hours**

System Components
Switch On / Off
Procedures after power interruption
Procedure after Emergency Stop
Full Power Down
Gantry Controls & contact pads
Table Controls
Accessories
Warm Up
Resets
In room monitor / video splitter
HD 50% Full Message / Disk management
Manual table release
Cleaning / disinfection and use of covers

KEYBOARD, MOUSE AND MONITORS **2**
AREA COVERED **1 hour**

Keyboard controls Function keys
Abort / Scan buttons
Preset WW / WL
Talk / Hold scan
Store / Erase / Filming
Use of microphone
Voice to scan timing button
Emergency stop button
Mouse combinations
Monitor on/off and security

USER INTERFACE - SCAN CONSOLE **3**
AREA COVERED **2 hours**

Date and Time edit
Study directory and management
Reconstruction Queue
Transfer Queue / Filming Queue
Archive Queue
Table / Gantry movement / iStation
Scan Modes
Autoview S / M +Applications
Raw Data Reconstruction
Tube heat (OLP) / Power Save

USER INTERFACE – DISPLAY CONSOLE (WHEN APPLICABLE) **4**
AREA COVERED **4 hours**

Autoview-M
MPR
Load Exams
MIP / Average / MinIP
Application tabs 1 / 2 / 3
Batch MPR
Mouse / keyboard functionality
3D
Load Exams
Preset page
Applications tabs 1 / 2 / 3
Bone removal
Key frame movie
Mouse / keyboard functionality
Manual adjust / Save presets
Clinical
Load Exams
Brain
Cardiac
Lung
Abdomen
Dual Energy
General
^{SURE} Subtraction
Report tab
Raw Data handling
Import / Export DVD-R(AM)

PATIENT REGISTRATION
AREA COVERED **0.5 hour**

Manual Registration
Input form HIS/RIS
Emergency Patient
Protocol Locations
Protocol Naming
Tab "Detail"
Examination Info presets (Tool)

UTILITY - TOOL
AREA COVERED **0.5 hour**

Drop-down menu
Tool
Tab Main Utility
Tab Protocol
Tab Engineering
Tab Service Engg

UTILITY SCAN CONSOLE AND DISPLAY CONSOLE **7**
AREA COVERED **2 hour**

Image Data Utility
Raw Data Utility
Info Change
Reconstruction options
Exam Plan Utility
Background Processes
Set up Utility
Maintenance Utility
Warm Up Options
Calibration
Back Up Tool
Multiview – Anet
Shutdown

SURE TECHNOLOGIES AND OPTIONS **8**
AREA COVERED **4 hours**

SURE ^{IQ}
SURE ^{Exposure}
SURE ^{Start}
Intermittent SURE ^{Start}
SURE ^{Subtraction}
Dental
BMS
CBP
Cardiac Functional Analysis
Coronary Artery
Calcium Score

STANDARD EXAM PLANS **9**
AREA COVERED **4 hours**

Head Scan and View
Head Helical
Head with and without contrast

Neck with contrast
Spine – all areas
Thorax HRCT
Thorax with contrast
Abdomen with preset delay
Abdomen multiphase
CTA Head
CTA Neck
CTA Body
CTA Peripheral
Sinuses

ADVANCED EXAM PLANS

AREA COVERED

8 hours

10

Volume Mode
Wide Volume Mode
Dynamic Volume Mode
Volume ECG – Calcium Score
Volume ECG – CTA/CFA
Volume ECG – Prospective CTA
Time Sequence Display
Dose Guard
4D Display in MPR and 3D
4D Brain Perfusion
4D Brain Perfusion Display mode
4D DSA Tool
Calcium Score
Coronary Analysis
CFA
Neuro ONE protocol
4D / CTA Combi Protocol
Test Bolus
Stroke Work-up
Move and Shoot
Body Perfusion

EXECUTION OF SCANNING

AREA COVERED

5 hours

11

Selection of appropriate Exam Plan
Scanogram
Vari-area
^{SURE} Start
^{SURE} IQ

G&G scanning
^{SURE} Exposure
CT Dose and considerations for different anatomic regions and patients
CT Dose, noise textures and image quality trade-offs
Anatomical Puppet HF & FF etc
Planning scan areas and positions
Start scan A / P / G
Delays
Editing protocol parameters
Protocol optimisation methods based on patient type and body organ
Breath commands on / off / edit
Activation of additional recons
Activation of Multiview
Use of Helical Skip
Use of Abort Button
Scan plan button
Repeat Examination
Quit Examination
Next Patient

RAW DATA HANDLING

AREA COVERED

1 hour

Selection of Patient and series
Helical Parameters
Use of MUSCOT and TCOT
Image Selector – Start/End
Slice Thickness selection
Recon Interval
FC
Application of RASP
User Filters
Archive Destinations
VFF / VFH
Selection and setting ROI
Size/Zoom of ROI, X/Y coordinates
Play/Reverse

MULTI PLANAR REFORMATION (MPR) ADDITIONS

AREA COVERED

2 hours

13

Selection of images
Display Format
Switching Patients
Navigation of MPR

Identification of areas A/B/C
WW/WL
Images thickness
Pan/Rotate/Zoom
Oblique MPR + View orientation
Movie Generation
Curved MPR
Image Save
Utility
Removal of cursor
MaxIP / MinIP
Oblique MPR
Keyboard controls MPR
Batch MPR
Spine MPR
Autoload

3D ADDITIONS

AREA COVERED

4 hours

14

Presets
Automatic Bone Removal
Manual Bone Removal
Shaded Volume
MaxIP
MinIP
X-Ray Projection
Flythrough
Layouts 3D
Segmentation
Clipping
Cutting
Combining 3D Models
Image Save
Keyframe Movie
Opacity
Manual Adjust
High Resolution Mode
Lighting
Oblique Clipping
Neg/Posi
Mask on MPR
Save & Reload 3D Page



CANON MEDICAL SYSTEMS

TRAINEE(S)	SIGNATURE

HEAD OF DEPARTMENT	SIGNATURE

APPLICATION SPECIALIST	SIGNATURE

DATE

Follow up training has been scheduled from _____ till _____

COMMENTS