Servicing the GE IGS/Optima/Innova Cath Lab Family:
IGS 5XX, IGS 6XX, Optima 320, Innova 2100/3100/4100

RSTI

Introduction

The GE IGS/Optima/Innova Cath Lab Family course is a skills development course designed to provide the experienced service professional with the skills necessary to fully service and calibrate this single/dual detector cath lab system. The IGS/Optima/Innova system is built around the JEDI generator. The IGS 520/530/540, IGS 620/630, Optima 320, & Innova 2100/3100/4100 will be covered in this course.

Note: The IGS Innova 2121 and 3131 are dual C-Arm (BiPlane) versions of the Innova 2100 and 3100.

Prerequisites

To attend this course, the service professional must have completed RSTI's Phases I-III or equivalent experience is required.

Objectives

- Describe the GE IGS/Innova cath lab system components
- Describe the function of the basic components of the GE IGS/Innova digital cath lab
- Demonstrate an understanding of the installation procedures associated with the GE IGS/Innova Cath lab
- Perform the necessary digital performance monitoring and quality assurance procedures
- Perform all system calibrations and adjustments to maintain the highest quality images
- Evaluate circuit functions to facilitate troubleshooting
- Perform a complete and thorough preventive maintenance inspection on the unit

Course Outline

DAY 1

- Digital cath lab overview
- Digital imaging process overview
- IGS/Innova Family system overview
  - o Compare & Contrast systems
- Major system components
  - o LC Positioner
  - o Detector sizes
    - 21/31/41cm
    - 520/530/540
    - 620/630
  - o C1 Cabinet
  - o C2 Cabinet
  - o Table
    - Omega table
    - Elegance table
  - o Smart box
  - o TSSC
  - o Chillers
    - Tube chiller
    - Detector chiller
  - o User interface
- IGS/Innova System evolution
- System logins and passwords

DAY 2

- Documentation
- System terms & acronyms
- Required tools & test equipment
- System specifications
- IGS/Innova system operation
- Lab Activities
  - o Basic system operation
  - o DL system software
  - o Image acquisition
  - o Image viewer
  - o Software navigation

DAY 3

- Operations
  - o DL – Digital Leader
  - o Revolution Detector
  - o IGS/Innova system
  - o IGS/Innova digital
  - o Positioner
  - o Alarm systems
  - o QAP – Quality Assurance Procedure
  - o Advantage Workstation
- Lab Activities:
  - o DL operation
  - o QAP
  - o Advantage Workstation

DAY 4

- Removal of covers & panels
- Component Identification
- Lab Activities:
  - o Covers & panels
    - DL
    - AW
    - Table

- LC
- JEDI generator
o Component Identification
o Schematic location
o Physical location
o Connector locations
o Fuse location/identification

DAY 5
- Site planning and installation
- Network configuration
o Ethernet config
o ArcNet Bus
o CAN Network
o Troubleshooting IGS/Innova internal Networks
- Service
- ITU/InnovaCentral Touchscreen replacement & configuration
- Lab Activities
o Mechanical alignments
o Setups
o Software configuration
o Network Configuration
o Configure and test output devices Output devices
  - PACS
  - Laser printer
  - RWS
  - Media
o Configure and test input devices
  - Modality worklist

DAY 6
- Lab Activities:
o Calibrations
  - DL
  - AW
  - Table

- LC
- JEDI generator
- KVM
- Monitors
- Dosimeter
- Detector
- Collimator
o Functional checks
- System backups
- System restore
- Lab Activities
o Full system calibration
o System backups
o System restore

DAY 7
- Lab Activities
o Full system calibration (Cont'd)
  - DL
  - AW
  - Table
  - LC
  - JEDI generator
- Functional Checks (Cont'd)
  - DL
  - AW
  - Table
  - LC
  - JEDI generator

DAY 8
- Preventive maintenance
o Positioner
o Table
o Cabinet
o Conditioners
  - Tube chiller
  - Detector chiller
o Tube

o Collimator
o Dose
o Power distribution
o UPS
- System service procedures
o Software reload
  - DL
  - RTAC
  - JEDI
o Options
o Networking
- Lab Activities
o PM
o Load from Cold (LFC)

DAY 9
- System schematics
o AWS
o Gantry
o Generator
- Troubleshooting
- Error codes
- System diagnostics
- Lab Activities
o Review system diagrams and communication
o Troubleshooting
o System diagnostics
o Access Error logs
o Central Listing
  - Test Points
  - LED's
o Networking
o Power Distribution/Supplies

DAY 10
- Course review
- Course evaluation
- Final exam

30745 Solon Road · Solon, OH 44139 · **P**440.349.4700 · **F**440.349.2053 · **Toll-Free** 1.833.229.7784
www.rsti-training.com · registration@rsti-training.com

Hands-On Training Course
Course Length: 2 Weeks
CEU's Awarded: 8 CEU's
State of Ohio Registration No. 93-09-1377T