

GE Healthcare

Education Services

# Cross Modality

## 2011 Technical Education



imagination at work

Advantage Workstation

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# Technical Service Training Tailored to Fit Your Needs!

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## Education Centers

**Waukesha, WI** - The GE Healthcare Institute is a state of the art facility providing a dedicated learning environment with over 210,000 square feet of learning space including 75 labs and 25 classrooms.

**Blended Curriculum** - Our technical service training offers a blended curriculum with web-based and in-resident courses. Our integrated training platform minimizes the time you spend away from home.

- **Web-based Courses**

Introductory, pre-requisite, and some differences courses are available for independent study.

- **In-Resident Courses**

(Classroom/Lab) Advanced courses held at the GE Healthcare Institute provide invaluable and practical hands-on training taught by industry-leading instructors.

**Differences Courses** - Tailored specifically for those who have previous training on GE Diagnostic Imaging Equipment and designed to bring you up to speed on the latest technology and equipment.

### GE Health and Safety Policy

GE Healthcare requires students to wear closed-toe and closed-heel shoes while attending training. Safety toe-shoes are required, but steel-toe shoe covers are available in the classroom. Open-toe, high-heel shoes or sandals are not permitted.

## About Technical Education from GE Healthcare

GE Healthcare Education Services delivers technical education for Diagnostic Imaging, Computed Tomography, Magnetic Resonance, Mammography, Nuclear Medicine/PET, Ultrasound, Monitoring, Diagnostic Cardiology, Infant Care and Anesthesia Delivery Systems and Respiratory products. We also offer a curriculum of Healthcare IT classes focused specifically on the needs of today's biomedical and technical professionals.

**Our goal** is to be recognized as the global leader in healthcare education solutions.

- Building customer knowledge and competencies through a diverse educational portfolio in an increasingly complex healthcare environment.
- Striving to exceed customer expectations by delivering exceptional quality education that is clinically relevant and has a measurable impact on practice.
- Be a provider of choice for Healthcare IT education regardless of medical equipment choices, previous learning or experience.

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## Added value for your education investment

College credit is available for many of our classes, both technical and Healthcare IT, through the University of Phoenix and DeVry University. If you are working toward a degree, or contemplating one, these classes may bring you closer to completion. Visit [www.gehealthcare.com/training](http://www.gehealthcare.com/training) and choose "College Credit for Technical Training" for more information on these programs.

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Contact our registrar for more information.  
[EdServices@ge.com](mailto:EdServices@ge.com)  
or 1-888-799-9921 press option 2

# Registration Instructions

To download the Registration form, go to [www.gehealthcare.com/education](http://www.gehealthcare.com/education) (under Technical Service Education, select Diagnostic Imaging: GE). Click on the "Register" button and download the Service Training Application Form (pdf). After completing this form, fax to: 262-574-8627, Attn: Registrar, GE Technical Service Training. Or e-mail to: [EdServices@ge.com](mailto:EdServices@ge.com)

After your application form is received/approved, the Registrar will contact the student to confirm dates, course prerequisites, and housing details (if In-Resident). After attendance and payment details are confirmed, a formal confirmation letter will be sent. For current course information, pricing, registration, or lodging information, please visit our web site.

## Policies and Terms

- Accepted via email or phone: 888-799-9921 or [edservices@ge.com](mailto:edservices@ge.com)
- Must be received 15 business days prior to the course start date
- A \$1,000 per week "no-show" or cancellation fee will be incurred if a student does not show up for class or does not cancel before the 15 business day window
- GE reserves the right to cancel or reschedule any class. GE will not be held responsible for any travel costs incurred due to causes beyond our control, such as, but not limited to, hurricanes, tornados, or strikes

## Attendance

- Students are required to arrive on time for class.
- Class start and end times vary. Please refer to your e-mail enrollment notification.
- A "no-show" is not eligible for tuition reimbursement.
- Students must pass an assessment to receive certificate of successful completion.

## Cancellations

Please note that should cancellation of this class become necessary, less

than 20 working days (1 month) prior to the course start date, the following cancellation fees will be in effect: Please contact the Training Registrar directly if cancellation is necessary.

- Courses with a duration of one week or less: \$1,000
- Courses with a duration of two weeks or less: \$2,000
- Courses with a duration of three weeks or less: \$3,000

## Low Enrollment

GE Healthcare reserves the right to cancel classes due to low enrollment. Classes with low enrollment 15 business days prior to the scheduled date will be cancelled. Please consider this when booking your travel.

When GE Healthcare cancels a class, tuition will be refunded in full. Alternatively, tuition may be applied to the cost of another class scheduled to take place within 12 months of the original class.

GE Healthcare will not be held responsible for any travel costs incurred due to circumstances beyond our control, such as, but not limited to, hurricanes, tornados, or labor strikes.

Note: Most courses have the following special considerations: A functioning laptop computer with a CD-rom reader, network card and a modem card is required for use during this course. The browser on the computer must be IE4 or Netscape 4.5 or higher. Minimum system requirements include 133 MHz Windows 95, NY 4.0 or higher 32 MB of RAM 16-bit color display adapter.

## In-Resident Training at the GE Healthcare Institute

For your convenience during your in-resident training, there are onsite meal services and condominium accommodations conveniently located across the street from the Healthcare Institute.

## Program Managers

CT/PET & Cross Modality:

Joel Jensen                      [Joel.Jensen@ge.com](mailto:Joel.Jensen@ge.com)

MR:

Brian Adams                      [Brian.Adams@ge.com](mailto:Brian.Adams@ge.com)

Nuclear Medicine & Radiopharmacy:

Stacy Marten                      [Stacy.Marten@ge.com](mailto:Stacy.Marten@ge.com)

X-ray:

Dan Pittenger                      [Daniel.Pittenger@ge.com](mailto:Daniel.Pittenger@ge.com)

## Advantage Workstation 4.1/4.2

This training will support the service engineer as they install the Advantage Workstation 4.1 and 4.2 products across modalities and will cover the following topics:

- Safety
- System overview
- Install/Configure
- Troubleshooting
- System operation
- Version differences between Advantage Workstation 4.0, 4.1 and 4.2



### Course Competencies:

- Identify the features, functionality, and major components of the system
- Identify the basic setup and configuration
- Recognize how to operate the system in the application mode
- Identify troubleshooting techniques and tools
- Identify the differences between the Advantage Workstation 4.0, 4.1, and 4.2 products

**Product Number:**

R0902CM                      \$2,100

**Delivery Method:** Web

**Length of Course:** 5 hours

**Program Information:**

For the most current course information and pricing, please visit us at [www.gehealthcare.com/education](http://www.gehealthcare.com/education) (under Technical Service Education, click on Diagnostic Imaging: GE).

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## Advantage Workstation 4.2P

This training will update currently trained personnel with the new hardware, software, and installation information. Personnel who are new to the Advantage Workstation product need to complete the Advantage Workstation 4.1 / 4.2 to learn the theory of the product. They can then use this new course to update them on the new hardware, software, and installation information.

### Course Competencies:

- Work safely with Advantage Workstation (AW)
- Work with the new version of AW: 4.2P
- Prepare to install and configure AW 4.2P
- Install AW 4.2P
- Use Service Tools
- Troubleshoot AW

**Product Number:**

R0904CM

\$950

**Delivery Method:** Web**Length of Course:** 2 hours**Program Information:**

For the most current course information and pricing, please visit us at [www.gehealthcare.com/education](http://www.gehealthcare.com/education) (under Technical Service Education, click on Diagnostic Imaging: GE).

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## Advantage Workstation 4.3

This training will prepare the student to install and support the Advantage Workstation 4.3 product.

### Course Competencies:

- Identify the hardware specifications, new applications features, and Common Service Desktop for AW 4.3.
- Identify the functions of the new security features (PNF and EA3) that are available for AW 4.3.
- Identify the documentation and safety concerns with service and installation.
- Identify the different installation scenarios and the installation/configuration/Floating license/security process.
- Identify the methods to troubleshoot network, software, and security
- Identify the tasks to perform as part of preventive maintenance
- Identify the procedure to install and configure Direct Connect.



**Product Number:**

R0905CM

\$1,625

**Delivery Method:** Web

**Length of Course:** 3 hours

**Program Information:**

For the most current course information and pricing, please visit us at [www.gehealthcare.com/education](http://www.gehealthcare.com/education) (under Technical Service Education, click on Diagnostic Imaging: GE).

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## AW Server 2

This training will prepare the IT Admin to operate and maintain the AW Server 2 product.

### Course Competencies:

- Describe the AW Server 2 product, components, and features
- Identify the pre-installation and installation tasks
- Access and navigate User documents, Service and Administrative Tasks and Healthpage
- Perform day-to-day Administrative tasks
- Identify how to install Client and perform functional tests
- Identify basic troubleshooting strategies

**Product Number:**

R0908CM

\$545

**Delivery Method:** Web

**Length of Course:** 1 hour

**Program Information:**

For the most current course information and pricing, please visit us at [www.gehealthcare.com/education](http://www.gehealthcare.com/education) (under Technical Service Education, click on Diagnostic Imaging: GE).

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## Networking and DICOM Basic for DI Service

This course is for individuals involved in servicing medical equipment. By taking this course, you will have a general Networking/DICOM foundation. The product-specific aspects of networking will be covered in the in-resident training classes.

### Course Competencies:

- Theory of networking
- Open Systems Interconnection (OSI) Model
- UTP & TCP/IP protocols
- DICOM standard and conformance statements
- Troubleshooting network problems

**Product Number:**

R0907CM

\$2,590

**Delivery Method:** Web**Length of Course:** 4 hours**Program Information:**

For the most current course information and pricing, please visit us at [www.gehealthcare.com/education](http://www.gehealthcare.com/education) (under Technical Service Education, click on Diagnostic Imaging: GE).

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## Troubleshooting Basics

This course is for individuals involved in servicing medical equipment. By taking this course, you will learn a proven process for troubleshooting medical equipment. You will also learn how to use various tools in a troubleshooting situation and how to interpret error messages. This course will not address how to troubleshoot specific products; you will learn this information in product training.

### Course Competencies:

- Use a six-step troubleshooting process
- Follow the troubleshooting process for a service issue for your modality
- Use tools as required for troubleshooting
- Follow safety precautions when using troubleshooting tools

**Product Number:**

R0901CM

\$545

**Delivery Method:** Web**Length of Course:** 1.5 hours**Program Information:**

For the most current course information and pricing, please visit us at [www.gehealthcare.com/education](http://www.gehealthcare.com/education) (under Technical Service Education, click on Diagnostic Imaging: GE).

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## Essentials of Healthcare IT<sup>SM</sup>

This instructor-led class is specifically designed for technical professionals responsible for the installation and support of medical devices and the networks interconnecting them. The class is taught by highly qualified technical trainers and will focus on developing the practical skills needed by a biomedical engineer to interface with networked devices in healthcare today. Extensive labs with plenty of hands-on time allows the student with no previous IT training to gain confidence in this new and exciting arena. The class will build and troubleshoot flat, switched, routed, and wireless networks. Basic computer skills are required.



### Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Any professional who supports the field of medical technology

#### Purchase Packages:

##### Tuition:

R0248PG \$3,850

##### Tuition & lodging:

R0249PG \$4,775

##### Tuition, lodging & air:

R0250PG \$5,670\*

\* US only

**Delivery Method:** Classroom

**Length of Course:** 5 days

#### Course Location:

Please visit [www.gehealthcare.com/training](http://www.gehealthcare.com/training) for the most current information on dates and locations.

# Securing the Healthcare IT Environment<sup>SM</sup>

This instructor-led class is specifically designed for technical professionals responsible for the secure transport of electronic protected health information across healthcare IT infrastructures. This class is taught by experts in the healthcare IT field and topics include: a global security overview, relevant HIPAA Title II Privacy and Security Rule information, the top 10 HCIT network attacks and ways to prevent them, strategies to mitigate risk, and securing a home network. Hands-on labs include password cracking, configuring biometric identifiers, encryption, port scanning, using network analyzers, software firewall configuration, performing an MD5 Hash, and home router configuration. Students will perform a risk analysis of medical devices using MDS2 documentation and ACCE/ECRI tools. Basic computer skills and TCP/IP network troubleshooting techniques are required.



## Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Any professional who supports the field of medical technology

### Purchase Packages:

#### Tuition:

R0265PG \$5,000

#### Tuition & lodging:

R0266PG \$5,925

#### Tuition, lodging & air:

R0267PG \$6,820\*

\* US only

**Delivery Method:** Classroom

**Length of Course:** 5 days

#### Course Location:

Please visit [www.gehealthcare.com/training](http://www.gehealthcare.com/training) for the most current information on dates and locations.

#### Required IT Skills:

- GE Essentials of Healthcare IT or equivalent

For list of core IT skills, see chart on the Student Information page.

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## Wireless in the Healthcare IT Environment<sup>SM</sup>

This vendor-neutral class focuses on the installation, management, and troubleshooting of RF technologies in healthcare today; including WMTS, 802.11, RFID, and cellular communications. Topics include RF and antenna basics, common interference sources in healthcare, remote patient viewing using the Wireless Medical Telemetry Service (WMTS), 802.11 and access point configuration including wireless VLANs, RFID basics, cellular communications, and security requirements for wireless systems. Students receive hands-on training with network analyzers and spectrum analyzers, perform site surveys for WMTS and 802.11, and troubleshoot WMTS antenna systems.



### Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Any professional who supports the field of medical technology

#### Purchase Packages:

##### Tuition:

R0268PG \$5,000

##### Tuition & lodging:

R0269PG \$5,925

##### Tuition, lodging & air:

R0270PG \$6,820\*

\* US only

**Delivery Method:** Classroom

**Length of Course:** 5 days

#### Course Location:

Please visit [www.gehealthcare.com/training](http://www.gehealthcare.com/training) for the most current information on dates and locations.

#### Required IT Skills:

- GE Essentials of Healthcare IT or equivalent

For list of core IT skills, see chart on the Student Information page.



## Essentials of DICOM®

This instructor-led course prepares the participant to become proficient in the installation, maintenance and troubleshooting of DICOM on digital imaging networks. Participants will learn to use the DICOM standard as a reference source, analyze conformance statements for predicting connectivity, configure and use DICOM simulators, and capture and analyze DICOM traffic using freeware tools like the DICOM Validation Toolkit.



### Intended Audience

- Biomedical equipment technicians
- Biomedical and clinical engineers
- Biomedical and clinical engineering managers
- Medical technology managers
- Hospital IT staff
- Radiologist
- Any professional who supports the field of medical technology

#### Purchase Packages:

##### Tuition:

R0307PG \$3,500

##### Tuition & lodging:

R0308PG \$4,055

##### Tuition, lodging & air:

R0309PG \$4,950\*

\* US only

**Delivery Method:** Classroom

**Length of Course:** 3 days

#### Course Location:

Please visit [www.gehealthcare.com/training](http://www.gehealthcare.com/training) for the most current information on dates and locations.

#### Required IT Skills:

- GE Essentials of Healthcare IT or equivalent

For list of core IT skills, see chart on the Student Information page.

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General Electric Company reserves the right to make changes in specification and features shown herein, or discontinue the product described at any time without notice or obligation.

Contact your GE representative for the most current information.

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