



will soon be

# **CONTENTS**

## **GENERAL INFORMATION:**

IntroductionPage	3
2018 Training CalendarPage	3
Valuable InformationPage	4
Training Course Enrollment FormPage	5
Hotel InformationPage	6
Food and BeveragePage	7
Directions to GMIPage	8

## **ULTRASOUND IMAGING SYSTEMS** TRAINING ACADEMY COURSES:

Ultrasound 101Page 10	J
Siemens S2000 Service TrainingPage 10	0
GE E9 Service TrainingPage 1	1
GE E8 Service TrainingPage 1	1
Philips IU22/IE33Page 12	2
Philips Epiq/Affiniti	2
GMI Custom Courses Page 13	3





## INTRODUCTION

Thank you for choosing GMI as your training partner. GMI is committed to empowering the Biomed community with outstanding training programs. We believe that the more knowledge that we can pass on to the community, the better off patients will be served.

By providing cost effective, hands on and practical training, engineers are immediately able to impact the bottom line of the day to day operations.

## Benefits of GMI Training:

- Small Classes to increase Instructor to Student ratio
- Comprehensive Hands-On course instruction
- 24/7 Technical Support
- Cost Effective
- Time saving course gets engineers back to work quickly
- Best Instructors in the industry
- Ultrasound 101 Self-Pace video class
- Preventive Maintenance instruction

# 2018 TRAINING SCHEDULE

## **JANUARY SEPTEMBER** 23-24.....Siemens S2000 11-12.....Philips Epiq/Affiniti **OCTOBER FEBRUARY** 13-14.....GE Voluson E8 16-19......GE Voluson E8 15-16.....GE Vivid/Logiq E9 18-19.....GE Vivid /Logiq E9 APRIL **NOVEMBER** 24-25.....Philips iU22 & iE33 6-9.....Philips iU22 & iE33 26-27.....Philips Epiq & Affiniti 8-9.....Philips Epiq & Affiniti **AUGUST** 14-15.....Philips iU22/iE33

## ON THE ROAD TRAINING (WEST COAST)

JULY	
17-20GE	E8 & GE E9 (OTR)





# VALUABLE INFORMATION

## **ENROLLMENT:**

To book a seat in a training course, please complete the enclosed enrollment form and send it with the purchase order to:

.....

Mailing Address:

GMI

**ATTN: Training Department** 222 Rampart Street Charlotte, NC 28203

Fax: (704) 940-7756 Email: training@gmi3.com

Other payment: prepay options are accepted. Please refer to the enrollment form for details.

## START AND FINISH TIMES

All classes begin promptly at 9:15 am and finish at 5:00 pm.

## **CLASS SUPPLIES**

Each student needs to come prepared with a notebook and writing utensil; notebook PC is optional (All other study information will be provided by the ultrasound instructor). Complimentary wi-fi is available.

## **CANCELLATION**

Cancellations MUST be given twenty one days in advance. Failure to cancel before the 21 day window will result in no refund.

### **LOCATION**

All courses take place at our Charlotte, NC facility at 222 Rampart Street. The nearest airport is Charlotte Douglas International (CLT). CLT is a hub for American Airlines.

## **EXPENSES**

Students are responsible for all travel related expenses, including airfare, transportation, meals, and lodging. GMI will provide lunch during class hours.

## **ENTERTAINMENT**

Charlotte is conveniently located at the junction of I-77 and I-85 near the South Carolina border. Now the largest city in the state, Charlotte is well known for great food, shopping, and a variety of entertainment options. Home to the Carolina Panthers, Charlotte Hornets, Charlotte Checkers and NASCAR, there will never be a dull moment for the sports fanatic. Students will have the opportunity to explore activities from whitewater rafting at the U.S. National Whitewater Center to a beautiful nature walk at one of Charlotte's local parks. With plenty of things to do, Charlotte offers transportation by taxi, bus, and now the new LYNX blue line light rail. Welcome to the Queen City!!

GMI welcomes your comments or questions to any aspect of our training program or courses.





# TRAINING COURSE ENROLLMENT FORM

TRAINING COURSE/ DATE:		
TRAINING COURSE/ DATE:		
TRAINING COURSE/ DATE:		
ATTENDEE 1:		
ATTENDEE 2:		
EMAIL 1:		
EMAIL 2:		
FACILITY:		
ADDRESS:		
CITY:	STATE:	ZIP:
PHONE:	FAX:	
MANAGER'S NAME:		
PHONE:	E-MAIL:	
<ul><li>□ PAYMENT OPTION 1 (Credit Card)</li><li>□ VISA □ MASTERCARD □ AMEX C</li></ul>		
	OTAL ENROLLMENT FEE: \$	
'	OTAL LIVIOLLIVILIVITILL. \$	<del></del>
SIGNATURE		
BILLING ADDRESS (IF DIFFERENT THAN A	3OVE)	
CITY:	STATE:	ZIP:
☐ PAYMENT OPTION 2 (Pay by Check	<)	
PO#: (optional)		
Remit Payment To: Global Medical Imaging 222 Rampart Street Charlotte, NC 28203	, LLC	

\*Enrollment fees are non-refundable if cancellation is received 3 weeks (15 business days) or less before course date.

<sup>\*</sup>Please Note: Travel arrangements and accommodations are not provided in cost.



<sup>\*</sup>All payment are due in full 30 days prior to course to guarantee availability

# HOTEL INFORMATION

## **RECOMMENDED HOTELS:** (Close Proximity to GMI)

Hilton Garden Inn-Charlotte Uptown	(704) 347-5972
Hampton Inn – Charlotte Uptown	(704) 373-0917

## **ALTERNATIVE HOTELS:**

<b>The Westin Charlotte</b> 601 S College Street, Charlotte, NC 28202	(704) 375-2600
Charlotte City Center Courtyard by Marriott	(704) 926-5800
Marriott Charlotte City Center	(704) 333-9000
Holiday Inn Charlotte Center City	(704) 335-5400
Hyatt Place Charlotte	(704) 227-0500





<sup>\*\*</sup> Note that when locating the hotels on GPS, its' listed on 2nd Street, Charlotte, NC



## **AREA RESTAURANTS & BARS:**

NAME	TYPE	STREET ADDRESS/ WEB ADDRESS	RESERVATIONS	MILES FROM GMI	AVG. RATE
		WED ADDICESS			
Sullivan's	Steakhouse	Tremont Street http://sullivansteakhouse.co	(704) 335-8228 pm/	0.5	\$\$\$\$
Tyber Creek	Pub Bar	1820 South Blvd http://www.tybercreek.com	(704) 343-2727	0.5	\$\$
Hot Taco	Mexican	200 East Bland Street http://www.hottaco.com/	(704) 333-8226	1.1	\$\$
300 East	American	300 East Blvd http://www.300east.net/	(704) 332-6507	1.0	\$\$\$
Bad Daddy's Burger Bar	American	1626 East Blvd www.bigdaddysburgerbar.o	(704) 714-4888 com	1.9	\$\$
All-American Pub	American	200 East Bland Street http://www.allamericanpub	(704) 370-2000 clt.com/	1.1	\$\$
Fuel Pizza	Pizza/Salad	1801South Blvd www.fuelpizza.com	(704) 335-7375	0.4	\$
Mac's Speed Shop	BBQ	2511 South Blvd www.macspeedshop.com	(704) 522-6227	0.7	\$
BlackFinn	Bar & Lounge	210 E Trade Suite B 120 http://blackfinncharlotte.co	(704) 971-4440 m/	2.1	\$\$
Chipotle Mexican Grill	Mexican	2109 South Blvd www.chipotle.com	704.332.2311	0.5	\$
McCormick & Schmick's	Seafood	200 S Tryon St www.mccormickandschmid	(704) 377-0201 ks.com	1.9	\$\$\$





# DIRECTIONS TO GMI

## I-77 NORTHBOUND (FROM SC):

- 1) Take the REMOUNT RD. exit- exit 8.
- 2) Turn RIGHT onto REMOUNT RD.
- 3) Turn LEFT onto S TRYON ST (first light)
- 4) Turn RIGHT onto RAMPART STREET
- 5) GMI will be on your LEFT

## **I-77 SOUTHBOUND:**

- 1) Take the WEST BLVD exit- exit 9A.
- 2) Turn LEFT onto West Blvd.
- 3) Turn RIGHT onto SOUTH TRYON STREET

.....

- 4) Turn LEFT onto RAMPART STREET
- 5) GMI will be on your LEFT

## FROM HILTON GARDEN INN/ HAMPTON INN CHARLOTTE UPTOWN:

.....

(Shuttle Service to GMI available)

- 1) E. MLK Jr toward S. Caldwell
- 2) LEFT on Caldwell St
- 3) Caldwell St turns into South Blvd
- 4) RIGHT onto E. Tremont Ave
- 5) LEFT onto Hawkins
- 6) RIGHT onto Rampart (GMI will be on your right)

## FROM CHARLOTTE DOUGLAS AIRPORT:

.....

- 1) WIlkinston Blvd/US 29, N/US74E
- 2) RIGHT onto Remount Rd
- 3) LEFT onto S. Tryon
- 4) RIGHT onto Rampart ST (GMI will be on your left)



# **ULTRASOUND 101**

## **COURSE DESCRIPTION:**

This course covers the basic physics and principles of ultrasound. The class provides the theory and understanding behind ultrasound operation. Basic system architecture, transducer types and their applications will also be discussed.

Class gives background and fundamentals for ultrasound theory, operation and transducer identification. This course is self paced.

### **OUTLINE**

- ▶ Basic Theory
- ▶ Physics
- ▶ System Architecture
- ▶ Transducer Types and Applications

The course is available online.

\*Course is prerequisite for platform specific, unless attendee has 1 year of ultrasound experience



## Siemens S2000

## **COURSE DESCRIPTION:**

The S2000 is the flagship ultrasound system manufactured by Siemens. It is their premier system and is commonly found in both the Radiology and Cardiology departments. The system is an outstanding imaging system.

The S2000 service training course is designed for the ultrasound service professional. This course will focus on the system as it pertains to theory, architecture, block diagram and functional repair.

## OUTLINE

- ▶ Basic Theory
- ▶ System Familiarization
- ▶ Manual Overview
- ▶ System Architecture-Common Failures
- ▶ Troubleshooting-Replacement
- ▶ PM Procedure
- ▶ DICOM Connectivity

The course is completely hands on with labs focusing on scanning techniques, common failures, and board/module replacement.

\*Course prerequisite is 1 year of ultrasound experience or Ultrasound 101 course



# **GE Vivid/Logiq E9**

## **COURSE DESCRIPTION:**

The E9 series are both flagship Radiology and Cardiology ultrasound systems manufactured by GE. The system produces outstanding images due to extensive data interpolation performed in the BEP (Back End Processor).

The E9 service training course is designed for the ultrasound service professional. This course will focus on the system as it pertains to theory, architecture, block diagram and functional repair.

### **OUTLINE**

- ▶ Basic Theory
- ▶ System Familiarization
- ▶ Manual Overview
- ▶ System Architecture-Common Failures
- ▶ Troubleshooting-Replacement
- ▶ PM Procedure
- ▶ DICOM Connectivity

The course is completely hands on with labs focusing on scanning techniques, common failures, and board/module replacement.

\*Course prerequisite is 1 year of ultrasound experience or Ultrasound 101 course

## **GE Voluson E8**

## **COURSE DESCRIPTION:**

The Voluson E8 is one of the newest in the Voluson family of OB/GYN & Women's Health ultrasound systems produced by GE. The system provides anatomical images never seen before, has improved ergonomics and improved automation.

The E8 service training course is designed for the ultrasound service professional. This course will focus on the system as it pertains to theory, architecture, block diagram and functional repair.

## **OUTLINE**

- ▶ Basic Theory
- ▶ System Familiarization
- ▶ Manual Overview
- ▶ System Architecture-Common Failures
- ▶ Troubleshooting-Replacement
- ▶ PM Procedure
- ▶ DICOM Connectivity

The course is completely hands on with labs focusing on scanning techniques, common failures, and board/module replacement.

\*Course prerequisite is 1 year of ultrasound experience or Ultrasound 101 course







## PHILIPS IU22/IE33

## **COURSE DESCRIPTION:**

The iU22 and iE33 are the flagship ultrasound platforms manufactured by Philips. The iU22 is primarily a general imaging system while the iE33 is the premier cardiac system. Both systems offer excellent image quality and ergonomics. This platform is built on similar architecture of its predecessor the HDI 5000.

The iU22/iE33 service training course is designed for the ultrasound service professional. This course will focus on the system as it pertains to theory, architecture, block diagram and functional repair.

## **OUTLINE**

- ▶ Basic Theory
- ▶ System Familiarization
- ▶ Manual Overview
- ▶ System Architecture-Common Failures
- ▶ Troubleshooting-Replacement
- ▶ Host/SIP Replacement
- ▶ PM Procedure
- ▶ DICOM Connectivity
- ▶ Service access

The course is completely hands on with labs focusing on scanning techniques, common failures, and board/module replacement.

\*Course prerequisite is 1 year of ultrasound experience or Ultrasound 101 course

# PHILIPS EPIQ/Affiniti

## **COURSE DESCRIPTION:**

The Epiq & Affiniti series are the newest offering for the ultrasound modaility manufactured by Philips. The Epiq 5 & Affiniti 50 are primarily general imaging systems, while the Epiq 7 & Affiniti 70 are the premiere cardiac systems. These systems offer excellent image quality and ergonomics. These platform are built on similar architecture of their predecessors the iU22 & iE33.

The Epiq & Affiniti service training course is designed for the ultrasound service professional. This course will focus on the system as it pertains to theory, architecture, block diagrams and functional repair.

## OUTLINE

- ▶ Basic Theory
- ▶ System Familiarization
- ▶ Manual Overview
- ▶ System Architecture-Common Failures
- ▶ Troubleshooting-Replacement
- ▶ PM Procedure
- ▶ DICOM Connectivity

The course is completely hands on with labs focusing on scanning techniques, common failures, and board/module replacement.

\*Course prerequisite is 1 year of ultrasound experience or Ultrasound 101 course









# GMI CUSTOM COURSES

## **COURSE DESCRIPTION:**

If you do not see what you need here, please contact us. We can create custom courses based on the system mix of your facility. Custom courses can be performed at either your facility or GMI and are tailored to suit the level of expertise your engineers need.

All courses are conducted by GMI's experienced technical support engineers and provide not only the fundamental knowledge of ultrasound, but real world application and troubleshooting.

Hands on labs are critical and a part of every course designed by GMI to get a better understanding of the systems and subassembly replacement.



