



Imaging Education Associates is pleased to offer...

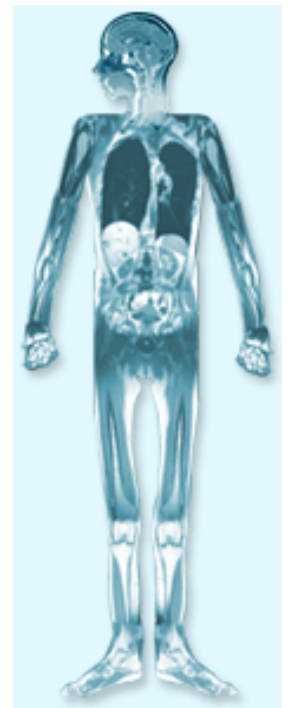
## 2010 Live Accelerated Internship Programs for the RT in MRI!

*Offered on Tuesday evenings... In the Philadelphia, PA Area!*

This all-inclusive program will provide 36 hours of didactic sessions covers the basic concepts and clinical applications of **Magnetic Resonance Imaging**. This 12 session program will be held every Fall from September-November on Tuesdays evenings at a convenient location. **Clinical rotations are available upon request.**

### Accelerated Internship for Technologists (RT's) in MRI

- Evening "Live Lectures" - 12 weeks of Live lectures @ 3 hours per session
- Includes Snack (light appetizer or sweetie, plus beverages) during the Breaks, for each class
- Includes Text book for the course
- Includes the Virtual component (36 hours of on-line video lectures - on-line and on-demand)
- Includes on-line (printable) handouts and worksheets
- Includes clinical rotations (UPON REQUEST)
- Includes category "A" credits



### Pre-Requisites

- To qualify for any of the advanced level examinations offered by the ARRT (for example MRI, CT, Ultrasound, Mammography, Cardiovascular, you must be a registered technologist (RT) in (Radiography, Radiation Therapy, Nuclear Medicine or Sonography)
- To qualify for Clinical Rotations, you must be an RT and have personal health insurance
  - You must provide proof of certification in the form of a copy of your RT card
  - You must provide proof of insurance in the form of a copy of your health insurance card
  - Some facilities require back ground check prior to clinical rotations

### Course Dates & Times

- September 7 – November 23, 2010
- Tuesday Evenings from 6:00 – 9:30 pm

### Location for the didactic (classroom) component of the live MRI courses

- 1055 Westlakes Drive  
Building 3  
3<sup>rd</sup> Floor  
Berwyn, PA 19312



### Location for the Clinical (hands-on) component of the MRI courses

Hands-on (clinical) Components are available upon request and are held at one of several imaging facilities at Christiana Imaging, including:

<ul style="list-style-type: none"> <li>• Christiana Hospital</li> <li>• Stony Batter</li> </ul>	<ul style="list-style-type: none"> <li>• HCCC</li> <li>• Wilmington</li> </ul>	<ul style="list-style-type: none"> <li>• Dover</li> <li>• Smyrna</li> </ul>
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## Tuition

- Early "Discounted" Registration (If registered and paid before August 1, 2010)
  - Didactic (classroom) component \$1,750.00
  - Clinical (hands-on) component \$ 695.00
  - Total for classroom plus clinical \$2,445.00
- Full Price Registration (If registered and paid after August 1, 2010)
  - Didactic (classroom) component \$2,000.00
  - Clinical (hands-on) component \$ 795.00
  - Total for classroom plus clinical \$2,795.00
- \* Payment Plan: For your convenience, Imaging Education Associates, LLC. offers an easy payment plan

(This plan does not apply to the early registration discount). Our easy payment plan consists of 3 payments

- September 1 \$700.00
  - October 1 \$700.00
  - November 1 \$700.00
  - \*\*If clinical, clinical tuition is \$795.00
- \*\* This payment MUST be completed prior to the start of your clinical rotations  
\* Payment plan can only be made by check payment. You must send a check to Imaging Educational Associates,.

## How to Register

- Register on line [www.imaginged.com](http://www.imaginged.com)
- Select the course
- Payments can be made
  - On-line using our secure partner with PayPal
  - By check, send to the address listed below(make check payable to Imaging Education Associates)

## Cancellation policy:

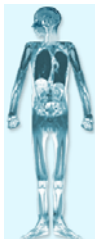
- Written notification of cancellation, or change in program date, must be received 2 weeks prior to the program for a refund (minus a \$100.00 service charge). **No refund after the course begins.**
- In the event of low registration, course may be cancelled. In this case a full refund will be granted or tuition can be used for another course. Course cancellations are rare and would occur no later than 4-6 weeks prior to the scheduled course date.

## About Us: Imaging Education Associates, LLC.

Imaging Education Associates (IEA) is comprised of Technologist Educators who are leaders in the field of Medical Imaging. Our faculty of educators (*our Imaging Education Associates*) have been hand selected to deliver up-to-date information on state-of-the-art imaging technologies. Candi Roth, CEO and Bill Faulkner, Executive Director of IEA were the first to provide continuing education for technologists on the "web". To view our other courseware visit our web site at [www.imaginged.com](http://www.imaginged.com).

## Contact Information:

**Imaging Education Associates, LLC.**  
**P.O. Box 2185**  
**Boothwyn, PA 19061**  
**484-832-1671**



## Live MRI Course

Most lectures will be presented by Carolyn Roth(Candi), Anthony Festa, and Joy Fox.

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Date: 9/7/2010 6:00:00 PM

Topic #1 Introduction to Magnetic Resonance Imaging 3.0 category A credits

This course provides an overview of MR imaging. Within this program the attendee will be introduced to MR imaging, the principles, the instrumentation, the history of MR, imaging planes and clinical indications for MR imaging. This course not only serves as an introduction to MR imaging, but also as a general overview of the didactic component (or the virtual classroom portion) of the on-line internship program..

06:00 pm – 06:20 pm	Introduction to Accelerated Internships in MRI	Carolyn Roth
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	1.1 What do we need to make MR Images?	Carolyn Roth
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	1.2 What Types of Images can be acquired with MR?	Carolyn Roth
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	1.3 Where did MR come from & Why do we do it?	Carolyn Roth
09:20 pm – 09:30 pm	Questions and answers for Topic #1	Carolyn Roth

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Date: 9/14/2010 6:00:00 PM

Topic #2 MR Instrumentation 3.0 category A credits

This course provides a review of magnetism. Within this three hour program the attendee will be presented with the specifics of MR instrumentation and hardware required for MR imaging.

06:00 pm – 06:30 pm	Sign in and Registration (soft drinks provided)	
06:30 pm – 07:20 pm	2.1 Magnetism & MR Magnets	Carolyn Roth
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	2.2 MR System Components	Carolyn Roth
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	2.3 Radiofrequency Coils	Carolyn Roth
09:20 pm – 09:30 pm	Questions and answers for Topic #2	Carolyn Roth

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Date: 9/21/2010 6:00:00 PM

Topic #3 Patient Care & MRI Safety 3.0 category A credits

This course provides an overview of the safety considerations associated with MR Imaging. Within this three hour program the attendee will be presented with the bioeffects and patient care issues associated with MR imaging.

06:00 pm – 06:30 pm	Sign in and Registration (soft drinks provided)	
06:30 pm – 07:20 pm	3.1 General Patient Care in Imaging	Joy Fox
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	3.2 Safety Considerations for the Magnetic Field	Tony Festa
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	3.3 Additional MR Safety Considerations	Tony Festa
09:20 pm – 09:30 pm	Questions and answers for Topic #3	Tony Festa

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Date: 9/28/2010 6:00:00 PM

Topic #4 Principles of MRI 3.0 category A credits

This course provides an overview of the principles of MR Imaging. Within this three hour program the attendee will be presented the effects of nuclei in a magnetic field, excitation and relaxation.

06:00 pm – 06:30 pm	Sign in and Registration (soft drinks provided)	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	4.1 What Nuclei are MR Active?	Carolyn Roth
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	4.2 Excitation in MR	Carolyn Roth
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	4.3 Relaxation in MR	Carolyn Roth
09:20 pm – 09:30 pm	Questions and answers for Topic #4	Carolyn Roth

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**Date:** 10/5/2010 6:00:00 PM  
**Topic #5** Pulse Sequence & Image Contrast for MRI **3.0 category A credits**

This course provides an overview of MR Image Contrast and Pulse Sequences. Within this three-hour program the attendee will be presented the effects various pulse sequences such as Spin echo, gradient echo, inversion recovery, Fast spin echo and echo planar imaging on image contrast.

06:00 pm – 06:20 pm	Sign in and Registration for evening course	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	5.1 Timing Diagrams for Spin Echo	Carolyn Roth
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	5.2 Pulse Sequences & Image Contrast for Spin Echo, Inversion Recovery & Gradient Echo	Carolyn Roth
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	5.3 Advanced Pulse Sequences MR Angiography (MRA), Echo Planar (EPI), Diffusion, Perfusion & BOLD	Carolyn. Roth
09:20 pm – 09:30 pm	Questions and answers for Topic #5	Carolyn Roth

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**Date:** 10/12/2010 6:00:00 PM  
**Topic #6** MR Image Formation **3.0 category A credits**

This course provides an overview of MR image formation. Within this three-hour program the attendee will be presented the principles of image formation and spatial localization in MR.

06:00 pm – 06:20 pm	Sign in and Registration for evening course	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	6.1 Matrix, Gradients & Signals	Carolyn Roth / Tony Festa
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	6.2 Gradients, Signals & K-space	Carolyn Roth / Tony Festa
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	6.3 Alternative K-space Filling and Fast Imaging Techniques	Carolyn Roth / Tony Festa
09:20 pm – 09:30 pm	Questions and answers for Topic #6	Carolyn Roth

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**Date:** 10/19/2010 6:00:00 PM  
**Topic #7** MR Contrast Agents & Administration **3.0 category A credits**

This course provides an overview of Contrast agents for MR imaging. Within this three-hour program the attendee will be presented the effects contrast agents on image contrast.

06:00 pm – 06:20 pm	Sign in and Registration for evening course	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	7.1 Review Pharmacology & Venipuncture	Joy Fox
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	7.2 Gadolinium Contrast	Carolyn Roth / Tony Festa
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	7.3 Other Contrast Media in MRI	Carolyn Roth / Tony Festa
09:20 pm – 09:30 pm	Questions and answers for Topic #7	Carolyn Roth / Tony Festa

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**Date:** 10/26/2010 6:00:00 PM  
**Topic #8** Parameters & Options for MR Imaging **3.0 category A credits**

This course provides an overview of imaging parameters, options and artifacts for MR imaging. Within this three-hour program the attendee will be presented the effects parameter changes on image quality for MR.

06:00 pm – 06:20 pm	Sign in and Registration for evening course	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	8.1 SNR & CNR Hardware & Voxel	Carolyn Roth
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	8.2 SNR & CNR Sampling & Contrast	Carolyn Roth
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	8.3 Artifacts in MRI	Carolyn Roth
09:20 pm – 09:30 pm	Questions and answers for Topic #8	Carolyn Roth

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**Date:** 11/2/2010 6:00:00 PM

**Topic #9** MR of the CNS (Brain & Spine)

**3.0 category A credits**

This course provides an overview of MR imaging of the central nervous system. Within this three-hour program the attendee will be presented the anatomy, pathology and imaging techniques for the brain, spine and associated structures.

06:00 pm – 06:20 pm	Sign in and Registration for evening course	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	9.1 Sectional Anatomy Overview of the Brain & Spine	Carolyn Roth
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	9.2 MRI of the Brain	Carolyn Roth
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	9.3 MRI of the Spine	Carolyn Roth
09:20 pm – 09:30 pm	Questions and answers for Topic #9	Carolyn Roth

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**Date:** 11/9/2010 6:00:00 PM

**Topic #10** Musculoskeletal Imaging

**3.0 category A credits**

This course provides an overview of MR imaging of the musculoskeletal system. Within this three-hour program the attendee will be presented the anatomy, pathology and imaging techniques for TMJ, shoulder, elbow, wrist, hip, knee, ankle and associated structures.

06:00 pm – 06:20 pm	Sign in and Registration for evening course	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	10.1 Musculoskeletal Sectional Anatomy	Carolyn Roth
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	10.2 MR Imaging Upper Extremity	Carolyn Roth
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	10.3 MR Imaging Upper Extremity	Carolyn Roth
09:20 pm – 09:30 pm	Questions and answers for Topic #10	Carolyn Roth

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**Date:** 11/16/2010 6:00:00 PM

**Topic #11** Body Imaging

**3.0 category A credits**

This course provides an overview of MR imaging of the body. Within this three-hour program the attendee will be presented the anatomy, pathology and imaging techniques for chest (including cardiac), breast, abdomen, male pelvis and female pelvis and associated structures.

06:00 pm – 06:20 pm	Sign in and Registration for evening course	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	11.1 Sectional Anatomy of the Body (Chest, Abdomen, Pelvis)	Tony Festa
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	11.2 MR of the Abdomen & Pelvis	Tony Festa
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	11.3 MR of the Chest	Tony Festa
09:20 pm – 09:30 pm	Questions and answers for Topic #11	Tony Festa

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**Date:** 11/23/2010 6:00:00 PM

**Topic #12** MR Registry Review

**3.0 category A credits**

This course provides a full review of all aspects of MR imaging. Within this three-hour program the attendee will be presented a review of the entire course in order to prepare for the MRI Boards .

06:00 pm – 06:20 pm	Sign in and Registration for evening course	
06:20 pm – 06:30 pm	Break (soft drinks provided)	
06:30 pm – 07:20 pm	12.1 What do the Content Specification say about the "MR Boards" & What are the Clinical Requirements?	Carolyn Roth
07:20 pm – 07:30 pm	Break (snack and soft drinks provided)	
07:30 pm – 08:20 pm	12.2 Imaging Procedures & Patient Care Review	Carolyn Roth
08:20 pm – 08:30 pm	Break (soft drinks provided)	
08:30 pm – 09:20 pm	12.3 Physics and Instrumentation	Carolyn Roth
09:20 pm – 09:30 pm	Questions and answers for Topic #12	Carolyn Roth