

# Course program 2022

# Application Training

For radiologists, physicians, medical assistants, technologists and system administrators

siemens-healthineers.com





# Dear Valued Customer,

Today I would like to invite you to join us on a lifelong journey: education and training!

As healthcare providers face various challenges, the well-being of patients increasingly depends on the abilities and skills of medical staff. Lifelong education is a critical success factor that improves clinical outcomes and leads to workflow optimization and increased cost efficiency.

This year's Application Training Booklet offers a comprehensive range of courses aimed at improving your staff's competency in using Siemens Healthineers equipment and strategically developing their job-specific skills, all to support best patient care and your success.

If you are interested in learning more about Siemens
Healthineers Education & Training, you can read about the
UpSkill portfolio, starting on <u>page 94</u>, as well as our
Education Story and our Blended Learning strategy.

We also offer a holistic education approach, with three options for Education Plans that combine different educational activities in one comprehensive package, on **page 97**.

PEPconnect with PEPconnections is our learning experience platform which enables you to provide your employees with the necessary education and resources while keeping costs to a minimum. It allows them to access knowledge whenever and wherever they need it and can be seamlessly integrated into their daily routine with management and administration options. You can learn more on page 99.

Explore all of our available offers. If you would like to receive updates and training news throughout the year, please do not hesitate to get in touch using our contact information on <a href="mailto:page 89">page 89</a>. Enjoy exploring this year's training and education programs and embark on this journey together with us!





Dr. Janina Beilner

Siemens Healthineers,

Customer Services

Global Head of Education



# Clinical Specialties









> Computed Tomography

Cardiovascular Care

> Interventional Radiology

Imaging IT









Molecular Imaging

Magnetic Resonance Imaging

Mammography

Radiography

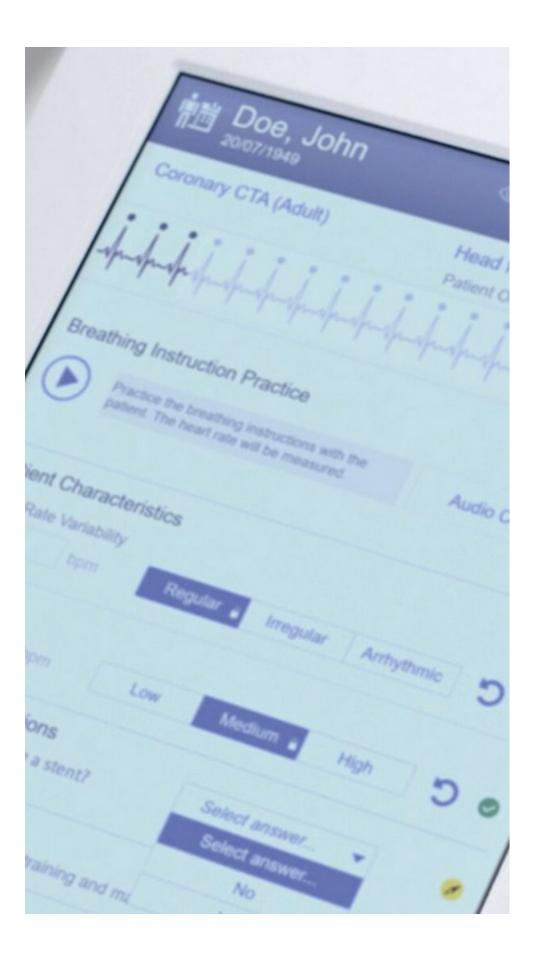
# Computed Tomography



	MTs / RTs*	Physicians	Physicists	IT	Basic skills	In-depth skills	Course type
Computed Tomography							
> CT Basic Course Somaris X	•				•		Α̈́
> Cardiac CT with Somaris 10	•	•				•	Ą
> CT Dose Optimization	•	•				•	Ą
> Coronary CTA Interpretation		•				•	<b>+</b>
> Dual Energy CT in Daily Practice	•	•				•	<b>+</b>
> Workshop/Online-Seminar for Physicists			•			•	
> CT Colonography with syngo.via	•	•			•		<b>+</b>
> MSCT Basic Workshop	•	•			•		<b>+</b>
> MSCT Angiography with syngo.via	•	•			•	•	1
> Cardiac CT with syngo.via	•	•			•	•	<b>+</b>
> CT Oncology with syngo.via	•	•				•	<b>+</b>
> Advanced Imaging CT Workshop	•	•				•	1
> Fellowship	•	•			•	•	<b>(+,</b>



# Virtual Classroom Trainings



	MTs / RTs*	Physicians	Physicists	ΙΤ	Basic skills	In-depth skills	Course type
Computed Tomography							
> myExam Companion Essentials	•				•		
> myExam Companion Advanced	•					•	
> Introduction to Cardiology in Somaris X	•				•		
> Dual Energy Technology Essentials	•						
> Dual Energy: TwinBeam vs. TwinSpiral	•				•		<u> </u>
> Imaging in Radiation Therapy			•			•	
> CT Essentials	•				•		<u></u>
> CT Cardiac	•					•	<u></u>
> CT Dual Energy	•					•	
> Total CT Stroke Imaging	•						

# 30 Credit Points

# CT Basic Course Somaris X

Basic skills for MTs/RTs



This three-day course is designed for future users of CT scanners using Somaris X (SOMATOM go.-systems and SOMATOM X.cite). You will learn basic technical principles and how to use the user interface of CT scanners using Somaris X in more detail. The aim of the course is to teach you how to carry out various CT examinations independently. This is a very practical course and about 30 percent of the time will be spent on the scanner and 40 percent on the simulator.

#### **Course content:**

- Overview of basic technical principles and safety aspects of CT scanners using Somaris X
- Intensive training on the user interface
- Performing various CT examinations using Scan&GO
- Image reconstruction using Recon&GO
- Introduction to data postprocessing using View&GO
- Performing various CT examinations using Scan&GO including the use of myExam Companion

# **Prerequisites:**

• Experience using Multislice CT

# Dates and language:

March 14, 2022, German May 16, 2022, German July 11, 2022, German

Oct. 17, 2022, German

# Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

4–10 participants

#### Course fee:

€1,250

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

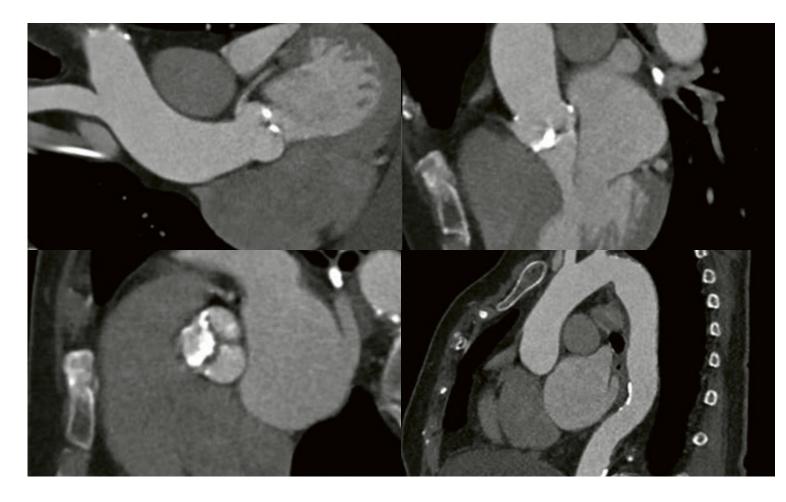
#### Course ID:

CT8SOGOBAS

# 19 Credit Points

# **Cardiac CT with Somaris 10**

In-depth skills for MTs/RTs and physicians



This two-day course is suitable for participants who wish to extend their knowledge of cardiac CT and related postprocessing programs. Theoretical content is supplemented by practical exercises to illustrate and deepen learner knowledge.

#### **Course content:**

- Technical principles of Multislice CT and dual-source CT
- Dose modulation options for CT scanner based on Somaris X (SOMATOM go.- and SOMATOM X. systems)
- Gated/triggered cardiac scan protocols
- Artifact recognition and prevention
- Cardiac-specific data processing
- 2D and 3D, MIP, MPR and VRT with syngo.via

# **Prerequisites:**

• Little or no experience working with cardiac CT systems

# Dates and language:

April 25.–26, 2022, German Oct. 24.–25, 2022, German

### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

6–12 participants

#### Course fee:

€1,540

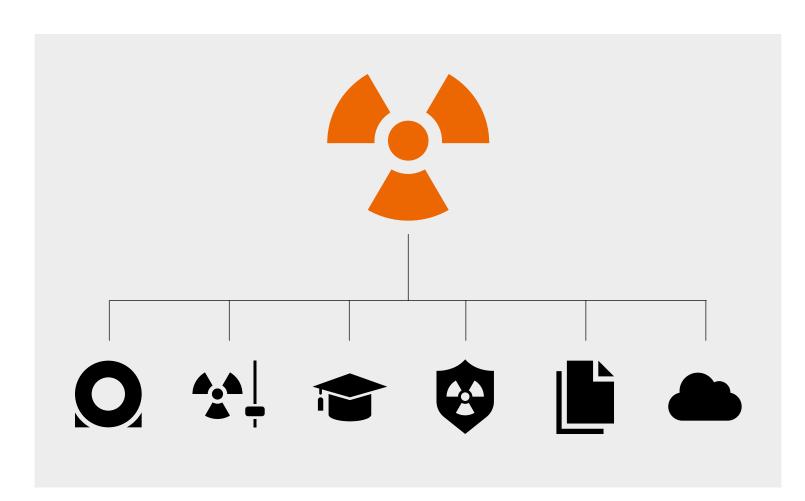
This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

CT8CARDREF

# CT Dose Optimization

In-depth skills for MTs/RTs and physicians, radiologists



In this one-day workshop Siemens Healthineers experts, as well as external consultants, impart profound knowledge from technical basics to dose management and dose reduction in Computed Tomography. You can enhance your skills about dose and scan parameters and their effect on image quality. All related topics are covered by presentations and demonstrations on the basis of case studies on simulator workstations.

#### **Course content:**

- Technical basics
- Dose and scan parameters in Computed Tomography
- Dose reduction methods (acquisition/reconstruction)
- Defining several parameters and rating the interaction between them (using a simulator for demonstration)

# **Prerequisites:**

• Basic knowledge of Multislice CT



#### Dates:

Please see:

<u>siemens-healthineers.com/at/education/</u>
med-imag-therapy

### Language:

German

### **Organizer and location:**

Siemens Healthcare Diagnostics GmbH Siemensstr. 90 1210 Vienna, Austria

#### Course size:

Max. 25 participants

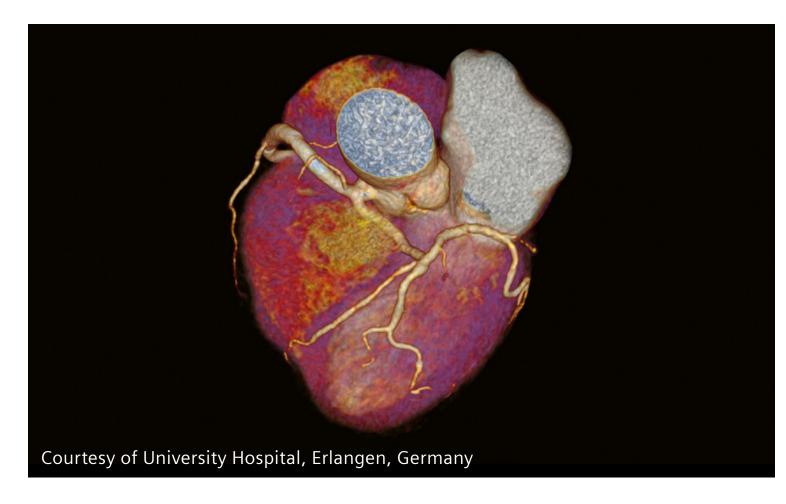
#### Course fee:

€470



# Coronary CTA Interpretation

In-depth skills for radiologists, cardiologists and physicians



This two-day course provides participants with hands-on training in the interpretation of cardiac CTA datasets.

Participants have the opportunity to use workstations with syngo.via's latest CT Cardiac Engine and evaluate original images of coronary CTA in compliance with AHA level II certification requirements.

#### **Course content:**

Two participants work together at a workstation, with faculty available to provide guidance and support. Invasive coronary angiography data will be available for each CT angiography. Scientific lectures round off the training syllabus.

### **Prerequisites:**

• Experience with Cardiac CT

# Scientific Director and content responsible:

• Prof. Stephan Achenbach, MD



# **Dates and language:**

Nov. 17-18, 2022, English

# **Organizer and location:**

Imaging Science Institute
University Hospital Erlangen
Ulmenweg 18
91054 Erlangen, Germany

#### Course size:

5–12 participants

#### Course fee:

€1,750

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

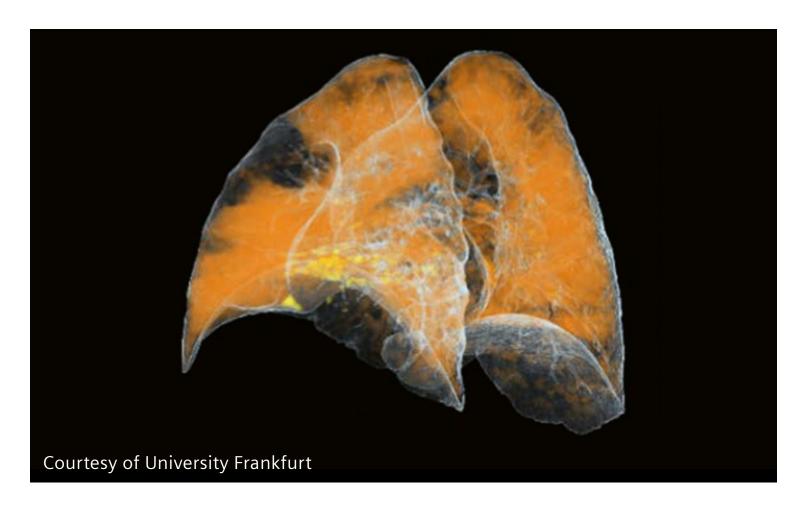
#### **Contact:**

To register, please contact your local Siemens Healthineers representative.



# Dual Energy CT in Daily Practice

In-depth skills for radiologists, physicians and MTs/RTs Workshop (two days) / Online-Seminar (one day)



This workshop introduces participants to the physics principles of Dual Energy and provides a supervised hands-on study of clinical data sets using *syngo*.via workstations, followed by interactive proof-reading and discussions.

#### **Course content:**

- Physics principles of Dual Energy
- Interactive evaluation of data sets showing how to optimize data reconstruction and clinical results
- Clinically useful applications (e. g. syngo.CT DE Virtual Unenhanced, syngo.CT DE Brain Hemorrhage or syngo.CT DE Gout) will be demonstrated and discussed
- Clinically proven tips and tricks on patient examination

# **Prerequisites:**

• Basic knowledge

### Workshop instructor:

• Christian Booz, MD (Head of CT Research)

# Dates and language Online-Seminar:

May 20, 2022, English April 29, 2022, English

### Dates and language workshop:

June 30-July 01, 2022, English

### Organizer:

Siemens Healthineers
Siemensstr. 3
91301 Forchheim, Germany

#### Course size:

5–10 participants

#### **Course fee Online-Seminar:**

€750 plus VAT

# Course fee workshop:

€2,000 plus VAT (incl. two hotel nights & catering)

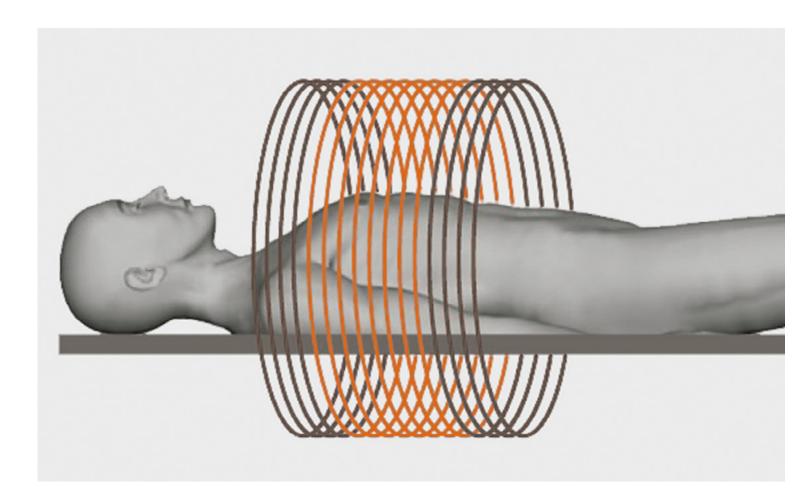
#### **Contact:**

To register, please contact your local Siemens Healthineers representative.



# Workshop/Online-Seminar for Physicists

In-depth skills for physicists



Specialists from our physics department will discuss in depth dose saving possibilities Siemens Healthineers offers with the SOMATOM CT systems. Participants will learn how to perform necessary quality controls and receive valuable tips.

### Course content workshop/Online-Seminar:

- Physics principles of SOMATOM CT systems
- Physics principles of Dual Energy
- Dose management
- State-of-the-art technologies such as CARE kV, CARE Dose4D,
   Turbo Flash scanning and iterative reconstruction techniques (e.g. SAFIRE, ADMIRE)

# Additional course content workshop

- Guidance CT-factory and detector center tour
- Artificial Intelligence
- CT-Photon Counting
- Teamplay

### **Prerequisites:**

• Basic knowledge with SOMATOM® CT systems

# **Dates and language Online-Seminar:**

April 06.-07., 2022

Nov. 09.-10., 2022

### Dates and language workshop:

Sept. 28.-29.,2022

### Organizer:

Siemens Healthineers

Siemensstr. 3

91301 Forchheim, Germany

#### **Course size Online-Seminar:**

5–15 participants

# Course size workshop:

5–10 participants

#### **Course fee Online-Seminar:**

€500 plus VAT

### Course fee workshop:

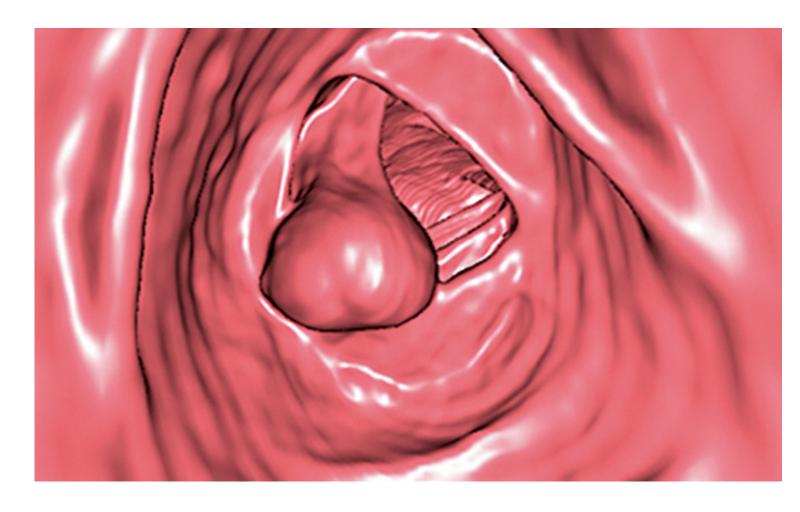
€2,000 plus VAT

(incl. two hotel nights & catering)

# 13 DFP Points

# CT Colonography with syngo.via

In-depth skills for MTs/RTs and physicians, radiologists



This two-day workshop includes scientific lectures, colon user interface presentations with main focus on interpretation and reporting of colon cases. Using *syngo*.via client-server based workplaces, participants can expand their knowledge and practice what they have learned in groups of no more than 12 people.

#### **Course content:**

- syngo.via user interface functionality
- Clinical presentation: polypoid lesions, malignomas, inflammatory bowel diseases, postoperative findings and extra colonic findings
- Presentation of syngo.via CT Colon Workflow
- Workflow concepts, evaluation strategies, data analysis, contents of findings, etc.
- Hands-on training

# **Prerequisites:**

• Familiarity with Multislice Spiral CT and previous experience with operating the *syngo*.via user interface

#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

### Organizer and location:

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1210 Vienna, Austria

#### Course size:

5–12 participants

#### Course fee:

€750 incl. VAT

# **MSCT Basic Workshop**

Basic skills for MTs/RTs and physicians, radiologists



This two-day workshop refreshes basic MSCT knowledge and includes presentations of the *syngo*.via user interface and hands-on training. The topics are covered by presentations of MSCT technology and dosimetry, patient preparation, examination planning and implementation, as well as evaluation strategies and workflow concepts.

Using state-of-the-art *syngo*.via workplaces, participants can expand their knowledge and practice in groups of no more than 12 people.

#### **Course content:**

- Presentation of MSCT technology, dosimetry, scan and recon parameter, usage of contrast media and image post-processing in theory
- Presentation of a CT-scanner examination user interface functionality (simulator)
- Presentation of *syngo*.via image post-processing as part of data analysis and documentation
- Hands-on training with syngo.via
- Verification of training skills via practical lectures

# **Prerequisites:**

• Familiarity with Multislice Spiral CT



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

### Language:

German

### **Organizer and location:**

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1210 Vienna, Austria

#### Course size:

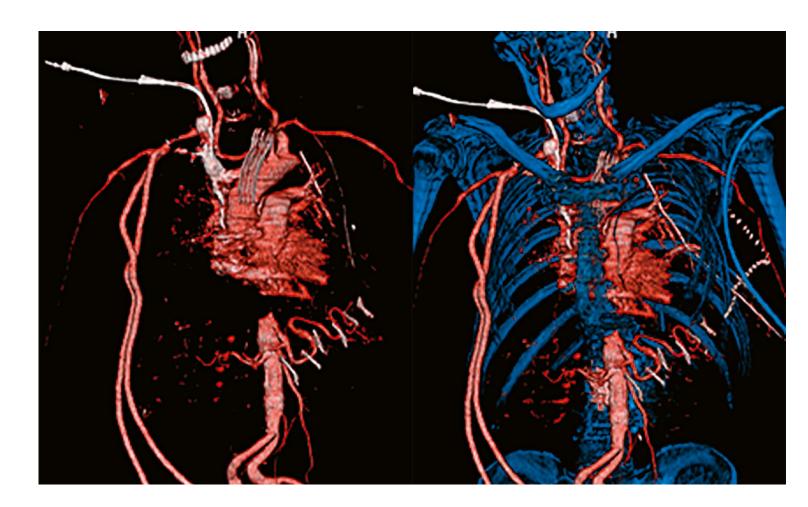
5–12 participants

#### Course fee:

€750 incl. VAT

# MSCT Angiography with syngo.via

Basic and in-depth skills for MTs/RTs and physicians, radiologists



This one-day MSCT angiography workshop covers the topics of patient preparation, examination planning and implementation. Participants are additionally introduced to user interface functionality, evaluation strategies, data analysis, contents of findings, and workflow concepts.

Using state-of-the-art *syngo*.via client-server based workplaces, participants can expand their knowledge and practice what they have learned in groups of no more than 12 people.

#### **Course content:**

- Application of contrast media
- Examination strategies
- Data management
- Assessing CPR, MIP, and VRT
- Indication for CTA
- Clinical significance
- "The acute aortic syndrome"
- Hands-on training

### **Prerequisites:**

- Experience with Multislice Spiral CT
- Some experience with operating the *syngo*.via user interface



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

### **Organizer and location:**

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1210 Vienna, Austria

#### Course size:

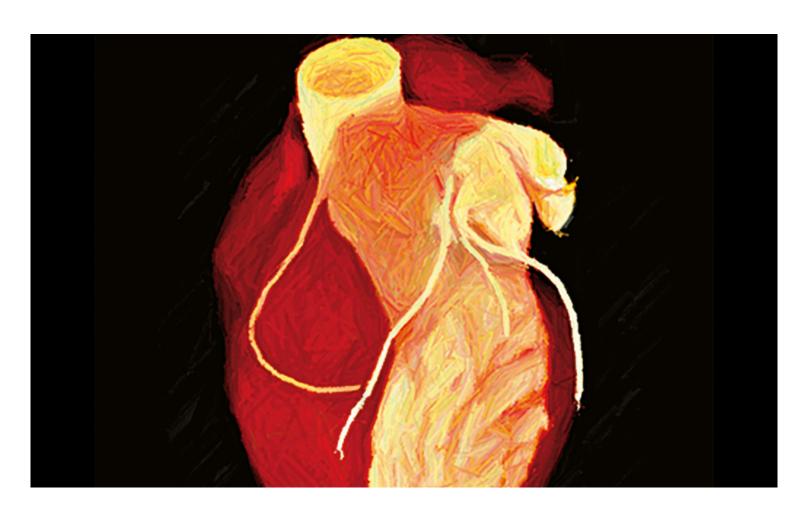
5–12 participants

#### Course fee:

€550 incl. VAT

# Cardiac CT with syngo.via

Basic and in-depth skills for MTs/RTs and physicians, radiologists



This one-day intensive course on cardiac CT and CTA includes scientific lectures, *syngo*.via user interface presentations and hands-on training. Using *syngo*.via client-server based workplaces, participants can expand their knowledge and practice what they have learned in groups of no more than 12 people.

#### **Course content:**

- Underlying technology
- Patient preparation
- Examination strategies
- Image post-processing on real case studies
- Anatomical fundamentals
- Step-by-step image analysis
- Calcium Scoring
- Coronary vessels
- Clinical indications
- Heart Perfusion

### **Prerequisites:**

- Experience with Multislice Spiral CT
- Some experience with operating the *syngo*.via user interface



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

### Language:

German

# **Organizer and location:**

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1210 Vienna, Austria

#### Course size:

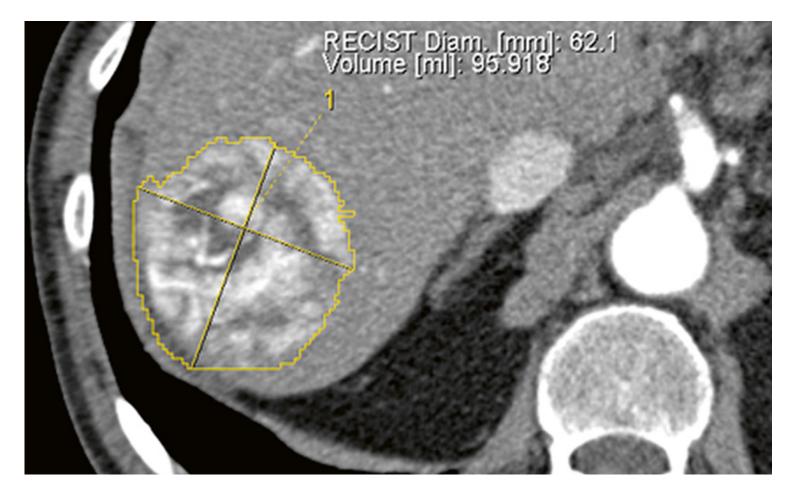
5–12 participants

#### Course fee:

€550 incl. VAT

# CT Oncology with syngo.via

In-depth skills for MTs/RTs and physicians, radiologists, internists, surgeons



This two-day clinical user training course introduces participants in working with the *syngo*.via CT-Oncology interface for objective tumor measurement in oncology staging and follow-up. After a general introduction on what is required of radiology in daily oncological routine, special emphasis will be placed on RECIST and volumetric analysis and the clinical background of quantitative abdominal and pulmonary imaging in oncology.

Using *syngo*.via client-server based workplaces, participants can expand their knowledge and practice what they have learned in groups of no more than 12 people.

#### **Course content:**

- syngo.via user interface functionality
- Patient preparation, examination planning and implementation
- Clinical presentations of tumor biology of metastasis, TU-staging, RECIST criteria, metastasis
- Presentation of *syngo*.via workflows: workflow concepts, evaluation strategies, data analysis, contents of findings, etc.
- Hands-on training

# **Prerequisites:**

- Experience with Multislice Spiral CT and some experience with operating the *syngo*.via user interface
- Advanced knowledge of CT Oncology



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

### Language:

German

### **Organizer and location:**

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1210 Vienna, Austria

#### Course size:

5–12 participants

#### Course fee:

€750 incl. VAT

# Advanced Imaging CT Workshop

Applications with *syngo*.via Skills for *syngo*.via user – MTs/RTs and physicians, radiologists



This one-day *syngo*.via Imaging Workshop in Computed Tomography will provide *syngo*.via users with advanced CT workflow knowledge, evaluation and documentation principles in theoretical and practical training sessions on client-server based demo consoles. Additionally, there will be an update to recent software version changes to get acquainted with news on basic configuration options, different roles and the user interface.

The main topic of the course is to assure knowledge of advanced visualization in CT Imaging throughout all CT Engines.

#### **Course content:**

- Update software "state-of-the-art"
- CT Vascular
- CT Cardiac
- MM Oncology
- CT Bone reading
- CT Colon
- CT Pulmo 3D
- CT Neuroperfusion
- CT Neuro DSA
- CT Dual Energy
- CT Body Perfusion
- CT Liver Analysis
- CT Lung CAD

# **Prerequisites:**

• Basic IT and DICOM skills, clinical workflow and experience in operating the *syngo*.via user interface



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

### Language:

German

### Organizer and location:

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1210 Vienna, Austria

#### Course size:

5–12 participants

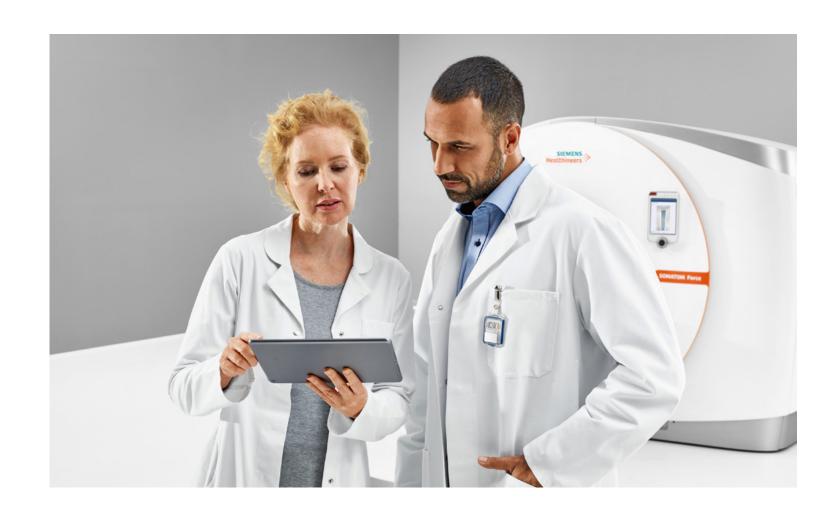
#### Course fee:

€550 incl. VAT



# Fellowship

Basic and in-depth skills for radiologists, MTs/RTs and physicians



Participants will have the opportunity to optimize their clinical skills with a clinical fellowship (observership) program. Following the pace of daily life at the selected site, the program draws on real experience. The clinical specialists demonstrate proven clinical workflows, examination procedures, and reporting including software applications, scanner protocols, and contrast agent injection.

# **Fellowship content:**

General CT, Cardiology, Dual Energy, Neurology, Oncology, Virtual Colonoscopy, Intervention and Virtual Autopsy/Forensics

# **Prerequisites:**

• Basic knowledge

# Dates and language:

On request, English

# Organizer:

Siemens Healthineers
Siemensstr. 3
91301 Forchheim, Germany

# Fellowship instructor:

Multinational Fellowship sites

# Fellowship size:

1–2 participants

# Fellowship duration:

2–5 days

# Fellowship fee:

On request

# **Registration:**

Please contact your local Siemens Healthineers representative.



# myExam Companion Essentials

# Basic skills for MTs/RTs



This introductory course to myExam Companion is suitable for participants who wish to expand their knowledge on this technology. Theoretical content is supplemented by practical exercises in simulators to illustrate and deepen learner knowledge.

#### **Course content:**

- Introduction to the myExam Companion technology
- Usage cases
- Review of factory decision trees
- Parameter adaption of the decision trees
- Troubleshooting
- Self-learning material in PEPconnect

# **Prerequisites:**

• Good knowledge of the Somaris X user interface, in particular of protocol creation and adaption

Dates:

On request

Length:

1.5 hours

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

Up to 8 participants

Course fee:



# myExam Companion Advanced

In-depth skills for MTs/RTs



This advanced course is suitable for participants who routinely use myExam Companion and wish to be able to confidently manipulate and create decision trees. Theoretical content is supplemented by practical exercises in simulators to illustrate and deepen learner knowledge.

#### **Course content:**

- myExam Companion overview: technology, usage cases, factory decision trees
- Understanding the principles of designing a decision tree
- Modeling and implementing a decision tree
- Decision tree troubleshooting
- Self-learning material in PEPconnect

# **Prerequisites:**

• Good knowledge of the Somaris X user interface and user-level experience on the usage of myExam Companion

Dates:

On request

Length:

2 hours

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

Up to 8 participants

Course fee:



# Introduction to Cardiology in Somaris X

Basic skills for MTs/RTs



This introductory course Cardioloy in Somaris X systems is suitable for participants who are performing sporadically cardiac acquisitions in Somaris X systems or are about to start performing such acquisitions. The main focus of this course is to guide participants through the cardiology-related protocols, user interface elements and discuss the different available acquisition modes.

#### **Course content:**

- Cardiac acquisition modes in Somaris X
- User Interface elements in cardiac acquisitions
- Reconstructions
- Review of cardiac factory protocols
- Review of cardiac factory decision trees
- Parameter adaption and troubleshooting
- Self-learning material in PEPconnect

# **Prerequisites:**

- Good knowledge of the Somaris X user interface
- Fundamentals of cardiac anatomy and cardiac CT acquisition modes

Dates:

On request

Length:

2 hours

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

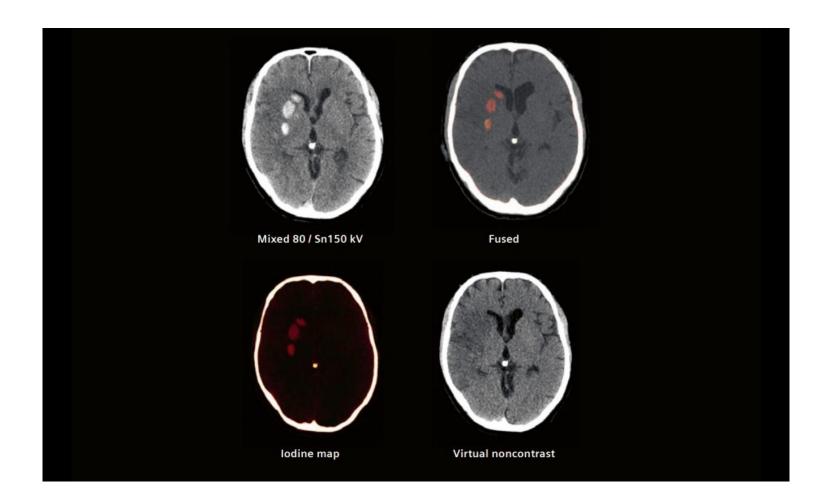
Up to 8 participants

Course fee:



# Dual Energy Technology Essentials

Basic skills for MTs/RTs



This introductory course aims to provide an overview of Siemens Healthineers Dual Energy technologies and their implementations in different product lines. After completing this course, participants should be able to distinguish between the different acquisition modes and understand their advantages and disadvantages.

#### **Course content:**

- Physical principles of Dual Energy
- Dual Energy acquisition modes
- Clinical usages of Dual Energy
- Dual Energy implementations in the scanner portfolio
- Self-learning material in PEPconnect

# **Prerequisites:**

- Routine use of SOMATOM scanners
- No previous knowledge of Dual Energy required

Dates:

On request

Length:

2 hours

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

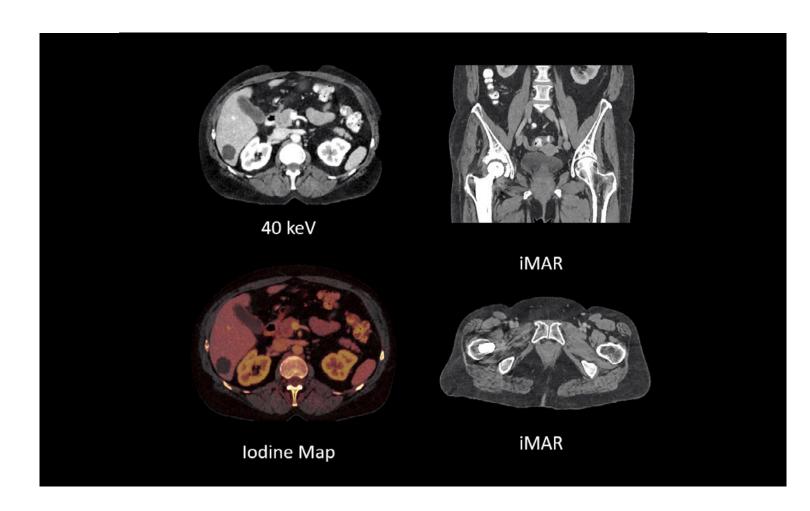
Up to 8 participants

Course fee:



# Dual Energy: TwinBeam vs. TwinSpiral

Basic skills for MTs/RTs



This course aims to help Siemens Healthineers Dual Energy users to better understand the advantages and disadvantages of the TwinBeam and TwinSpiral Dual Energy modes.

#### **Course content:**

- Physical principles of Dual Energy
- TwinBeam acquisition mode
- TwinSpiral acquisition mode
- Clinical indications for the different acquisition modes
- Self-learning material in PEPconnect

# **Prerequisites:**

• This course is aimed at customers who have recently started or are about to start Dual Energy scanning in Somaris X scanners

Dates:

On request

Length:

2 hours

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

Up to 8 participants

Course fee:



# Imaging in Radiation Therapy

In-depth skills for MTs/RTs



This course focuses on essential physics topics, quality assurance and dedicated workflow on the Siemens Healthineers scanners developed for radiation oncology. The course is structured as self-paced online training in PEPconnect, followed by an instructor-guided virtual classroom session which is complemented with 1.5 days of on-site practice.

#### **Course content:**

- CT essentials for RT: iMAR, Kernel concept, SAFIRE, CarekV, CareDose4D, Extended HU-scale
- Workflow overview go.Sim, go.Open Pro
- DirectORGANS
- Sim&GO
- DirectLASER
- Direct i4D
- System Administration
- Start-up
- Image Quality check
- Geometric and Laser QA

### **Prerequisites:**

• This course is aimed at physicists working in radiation therapy departments

Dates:

On request

Length:

2.5 days

Virtual and on-site training

Language:

English

Organizer:

Siemens Healthineers Education,

Computed Tomography

Course size:

Up to 8 participants

Course fee:

€3,185 plus VAT



# CT Essentials

# Basic skills for MTs/RTs



This introductory course is suitable for participants who are new to Siemens Healthineers CT scanner systems. After finishing this course, participants will gain a solid know-how on the scanning fundamentals and advanced technologies available in the SOMATOM CT Scanners. Theoretical content is supplemented by practical exercises in simulators to illustrate and deepen learner knowledge.

#### **Course content:**

- Self-learning material in PEPconnect:
- CT Essentials and Dose
- CT Image Quality
- Siemens Healthineers Kernel Overview
- CARE Features
- FAST Features
- Management of scan and contrast media injection (incl. CARE Contrast)
- CT Field of View overview
- Iterative Reconstruction
- Practical exercises in simulator

### **Prerequisites:**

• This course is aimed at people with completed education as technologist/MTRA and basic understanding of CT Imaging

Dates:

On request

Length:

3 days

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

Up to 8 participants

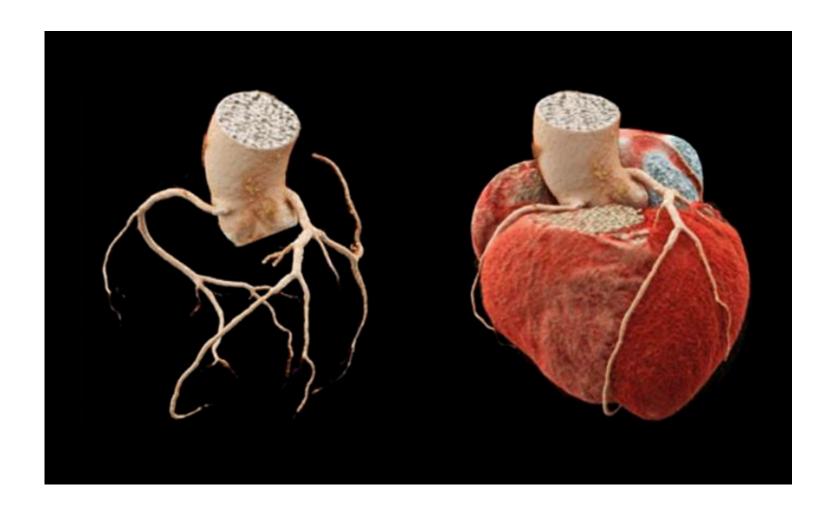
Course fee:

€2,350 plus VAT



# **CT Cardiac**

# In-depth skills for MTs/RTs



This advanced course is suitable for experienced users of Siemens Healthineers CT scanner systems who want to acquire a deep know-how on CT cardiac acquisitions using SOMATOM CT scanners. Theoretical content is supplemented by practical exercises in simulators to illustrate and deepen learner knowledge.

#### **Course content:**

- Self-learning material in PEPconnect
- Cardiac scanning, protocols, dose modulation, etc.
- Cardiac image quality and artefacts
- Cardiac Postprocessing with syngo.via:
   CT CalScoring, CT Coronary, CT Cardiac Function
- Practical exercises in simulator

# **Prerequisites:**

- Experience in routine operation of SOMATOM scanners
- Experience with cardiac CT acquisitions is advantageous

Dates:

On request

Length:

3 days

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

Up to 8 participants

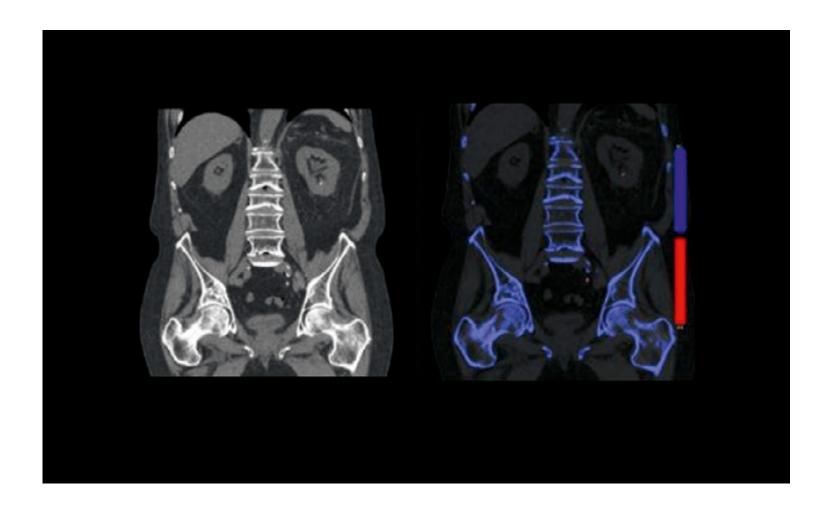
Course fee:

€2,350 plus VAT



# CT Dual Energy

In-depth skills for MTs/RTs



This advanced course is suitable for experienced users of Siemens Healthineers CT scanner systems who want to acquire a deep know-how on Dual Energy acquisitions using SOMATOM CT scanners. Theoretical content is supplemented by practical exercises in simulators to illustrate and deepen learner knowledge.

#### **Course content:**

- Introduction into Dual Energy (DE)
- Basics of physical background (Mixed, Material Labeling, etc.)
- DE Scanning and recommendations
- Postprocessing DE Application classes in syngo.via
   (Mono+, BR, VNC, Kidney, Gout, Bone Marrow)
- Self-learning material in PEPconnect

# **Prerequisites:**

- Experience in routine operation of SOMATOM scanners
- First experience with Dual Energy acquisitions is advantageous

Dates:

On request

Length:

3 days

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

Up to 8 participants

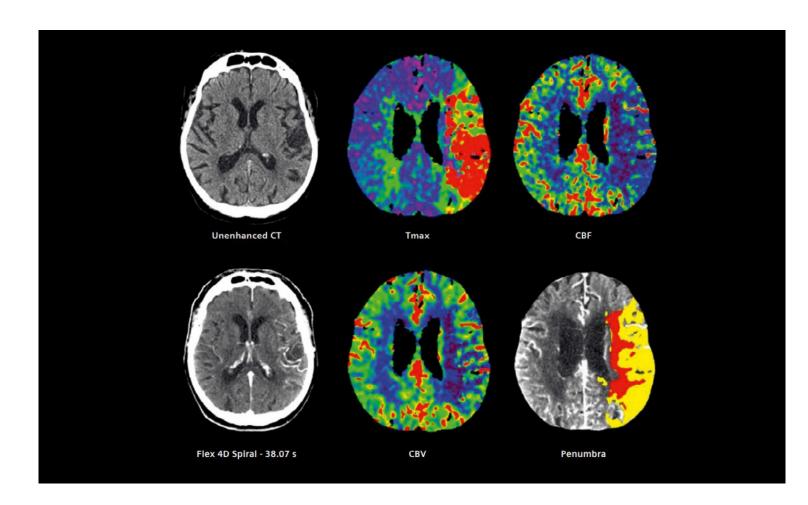
Course fee:

€2,350 plus VAT



# Total CT Stroke Imaging

In-depth skills for MTs/RTs



This advanced course is suitable for experienced users of Siemens Healthineers CT scanner systems who want to acquire a deep know-how on Stroke Imaging acquisitions using SOMATOM CT scanners. Theoretical content is supplemented by practical exercises in simulators to illustrate and deepen learner knowledge.

#### **Course content:**

- Introduction to Neuro Perfusion
- Scanning Neuro Perfusion (incl. Contrast)
- Postprocessing in *syngo*.via
- ASPECT
- Auto Stroke

# **Prerequisites:**

- Experience in routine operation of SOMATOM scanners
- First experience with CT Stroke acquisitions is advantageous

Dates:

On request

Length:

2 days

Language:

English

Organizer:

Siemens Healthineers Education, Computed Tomography

Course size:

Up to 8 participants

Course fee:

€1,600 plus VAT

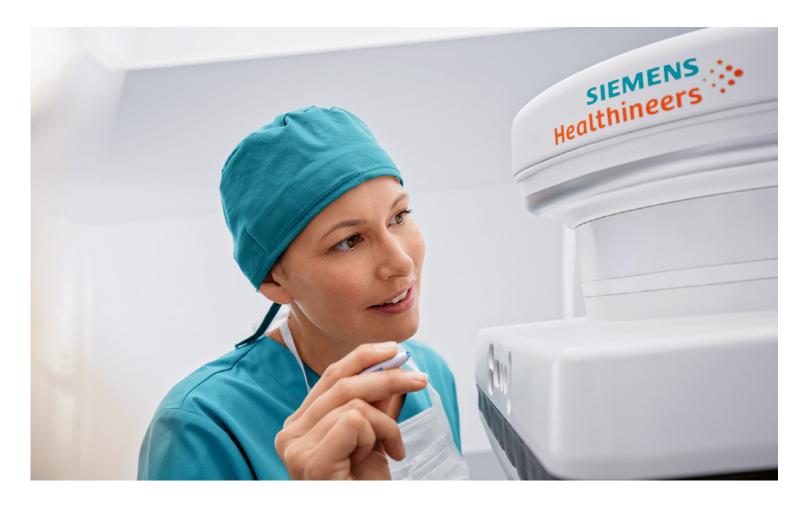
# Cardiovascular Care



	MTs / RTs*	Physicians	Physicists	ΙΤ	Basic skills	In-depth skills	Course type	
Cardiovascular Care								
Artis Basic Course	•						Ť	
Artis Workshop for Physicists			•				Ţ	
Interventional Cardiology	•	•					<b>Î</b>	
Fellowship	•	•			•	•	<b>(+,</b>	

# **Artis Basic Course**

Basic skills for MTs/RTs



This two-day course for physicians and medical technicians provides basic training in how to use an Artis angiography system.

Besides general system operation also radiation dose and dose-saving techniques are in the focus of this class.

The course is taught on an Artis zee/Q system in small groups, with a maximum of 10 participants. The content of the training is applied directly by using the system.

#### **Course content:**

- *syngo* user interface
- Acquisition techniques
- Organ programs
- Data transfer
- Image postprocessing
- Dose-saving techniques (CARE)

# **Prerequisites:**

• Some experience with systems in interventional angiography



# **Dates and language:**

On request or please see:

https://training.healthcare.siemens.com/

### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

4–10 participants

#### Course fee:

€825

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

**AX8SYNBAS** 



# **Artis Workshop for Physicists**

In-depth skills in image quality and dose savings



Image Quality specialists will discuss in depth the influence to image quality and radiation dose by components and settings in Artis angiography systems.

#### **Course content:**

- System components and system handling
- Fluoro and acquisition protocols
- Image quality essentials
- Detectors and X-ray tubes
- Image signal processing
- Dose and dose saving

# Dates and language:

On request or please see:

https://training.healthcare.siemens.com/

### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers

Global Training Center

Allee am Röthelheimpark 3

91052 Erlangen, Germany

#### Course size:

6–10 participants

#### Course fee:

€1,840 plus VAT

#### **Course ID:**

**AX8ARTPHYS** 



# Interventional Cardiology

In-depth skills for cardiologists, physicians and MTs/RTs

During the interactive course, you will learn about coronary angioplasty, the angiographic projections of the stenosis, the right selection of catheters, even tips and tricks of wire techniques and catheter intervention. Exercises are conducted using a CATHI computer-based simulation system and the newly developed pulsatile coronary model, CoroSim, in conjunction with a fully functional Siemens Healthineers biplane flat detector angiography system.

A newly upgraded scenario based virtual simulation system developed by Terumo enables participants to refresh and experience situational procedural sequences. A silicon vessel model using real interventional devices will enhance reflection of knowledge transforming into acquired skills. In addition to the hands-on experiences, lectures are presented on topics such as radiation protection, complications and quality management.

#### Seminar:

- Optimized angiographic settings at intracardiac catheter examination and intervention
- Basic Principles of radiation dose reduction
- Quality management in the cath lab
- Case studies: Complication management in the cath lab

# **Hands-on Training:**

- Coronary intervention exercises using CATHI computer-based simulation system
- Coronary intervention training using a pulsatile heart simulator with a Siemens Healthineers angiocardiography system
- Training with 3-dimensional coronary quantification tool
- Transradial access

### **Prerequisites:**

• Little or no experience in interventional cardiology

# Dates and language:

On request, English

### Organizer and location:

Cardiac Department
National University Heart Centre, Singapore
1E Kent Ridge Road
NUHS Tower Block, Level 9
Singapore 119228

#### Course size:

Small group size to enhance learning success

#### Course fee:

S\$1,900 plus GST

#### **Contact:**

Christina Ng Maideen Sadayan



# Fellowship

Basic and in-depth skills for cardiologists, physicians and MTs/RTs



Learn more from our medical experts directly in a physician's cardiovascular environment. Fellows will gain real-life experience by shadowing a hospital's clinical employee through their daily workflow and learning how examinations are performed on site with Siemens Healthineers systems (observership).

# Fellowship content:

Cardiovascular solutions in coronary artery diseases, congenital heart diseases, structural heart diseases, arrhythmias or heart failure (ARTIS icono, Artis one, Artis Q.zen, ARTIS pheno, Sensis Vibe).

# **Prerequisites:**

Basic knowledge in cardiovascular care

# Dates and language:

On request, English or German

# Organizer:

Siemens Healthineers
Siemensstr. 3
91301 Forchheim, Germany

# Fellowship instructor:

Multinational Fellowship sites

# Fellowship size:

1–3 participants

# Fellowship duration:

2–5 days

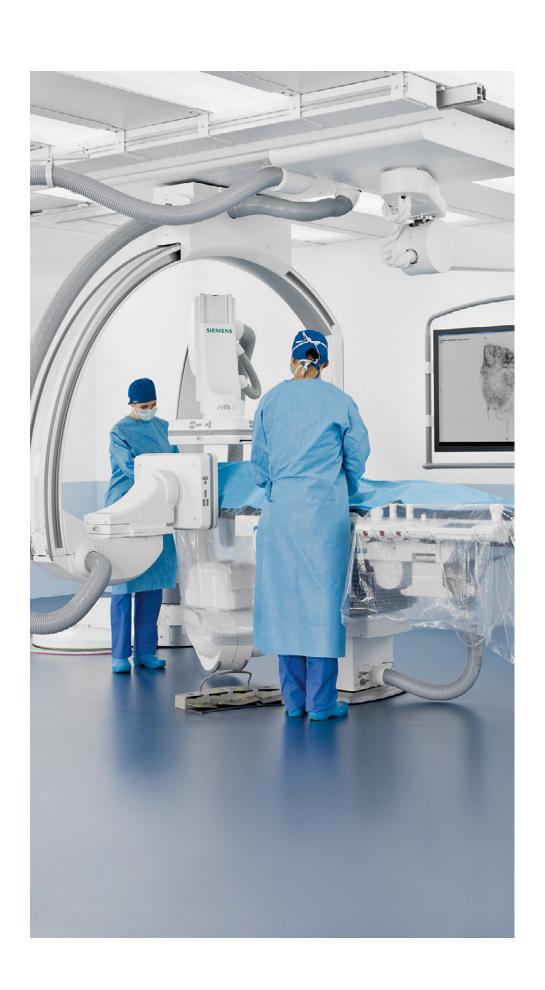
# Fellowship fee:

On request

### **Registration:**

Please contact your local sales representative.

# Interventional Radiology



	MTs / RTs*	Physicians	Physicists	ΙΤ	Basic skills	In-depth skills	Course type	
Interventional Radiology								
> Artis Workshop for Physicists			•			•	Ÿ	
> Optimize Dose in Angiography	•	•	•		•		<b>+</b>	
> Interventional Radiology	•	•					<b>+</b>	
> Advanced Image Guidance		•					<b>+</b>	
> Neuroradiology – ARTIS icono biplane	•	•				•	<b>(+,</b>	
> Radiology and Interventional Therapy – Artis zee ceiling	•	•				•	<b>(+,</b>	



# **Artis Workshop for Physicists**

In-depth skills in image quality and dose savings



Image Quality specialists will discuss in depth the influence to image quality and radiation dose by components and settings in Artis angiography systems.

#### **Course content:**

- System components and system handling
- Fluoro and acquisition protocols
- Image quality essentials
- Detectors and X-ray tubes
- Image signal processing
- Dose and dose saving

# Dates and language:

On request or please see:

https://training.healthcare.siemens.com/

### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers

Global Training Center

Allee am Röthelheimpark 3

91052 Erlangen, Germany

#### Course size:

6–10 participants

#### Course fee:

€1,840 plus VAT

#### **Course ID:**

**AX8ARTPHYS** 



# Optimize Dose in Angiography

Basic skills for clinical staff who are exposed to radiation



Holistic approach designed to help increase personal dose awareness and develop competence in reducing staff and patient radiation exposure during interventional procedures.

#### **Course content:**

- In-depth analysis, definition, and advice on dose performance measures
- Customized roadmap for education and measures to be implemented
- Implementation of individual measures such as optimized workflows and dose education
- Monitoring for a set time period
- Evaluation of results and recommendations for long-term goals

# Dates and language:

On request

# Organizer:

Country organization / HQ Apps team

#### Location:

At the customer's premises

#### Course fee:

On request

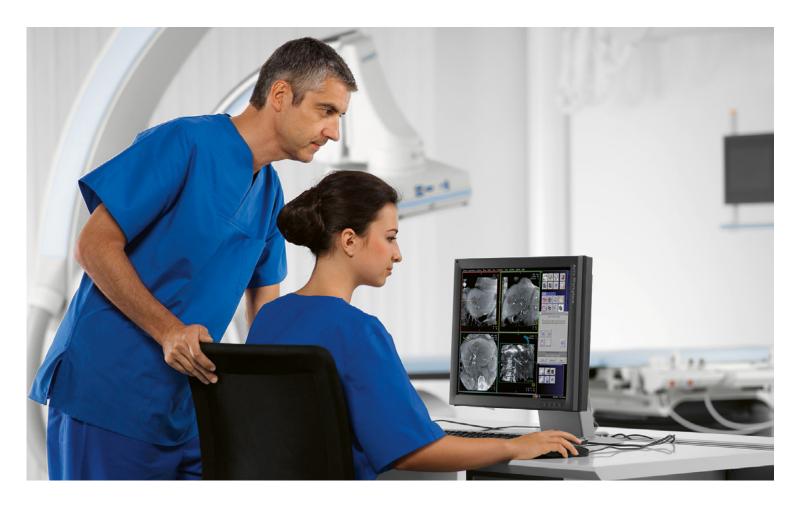
# **Registration:**

Please contact your local Siemens Healthineers representative.

# 15 CME Credits

### Interventional Radiology

In-depth skills for MTs/RTs and physicians



In addition to intensive small-group training on the treatment of stenosis in renal arteries, pelvic arteries and/or femoral arteries, this two-day workshop also focuses on the fundamentals of modern radiology. Under the guidance of experienced interventional radiologists and through the use of practical case studies, participants are trained how to safely handle interventions at varying levels of difficulty on modern, realistic simulators.

#### **Course content:**

- Endovascular therapy of renal artery stenosis
- Treatment of stenosis and occlusions in pelvis and a. femoris superficialis (AFS)
- Simulator training
- Case discussions

#### **Dates and language:**

On request or please see:

https://training.healthcare.siemens.com/

#### **Organizer and location:**

Imaging Science Institute
University Hospital Erlangen
Ulmenweg 18
91054 Erlangen, Germany

#### Course size:

6–12 participants

#### Course fee:

€1,120

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

**AX8ANGKAT** 



### Advanced Image Guidance

In-depth skills for interventional radiologists



This one- and a half-day clinical workshop is a comprehensive program for physicians, addressing advanced imaging and guidance techniques in Interventional Radiology (IR) in order to substantially improve practical skills in this field.

The workshop focuses on clinical topics and involves various training methods, including lectures and practicing with phantoms directly on the system.

#### **Course content:**

- 2D guidance functions
- 3D acquisition and processing
- 3D guidance tools
- syngo Embolization Guidance
- syngo Fusion Package
- syngo Needle Guidance

#### **Prerequisites:**

• Basic experience in Interventional Radiology

#### Dates and language:

On request, English

#### Organizer:

Siemens Healthineers
Siemensstr. 3
91301 Forchheim, Germany

#### Location:

Medizinische Hochschule Hannover (MHH) Carl-Neuberg-Str. 1 30625 Hannover

#### Course size:

5–8 participants

#### Course fee:

On request

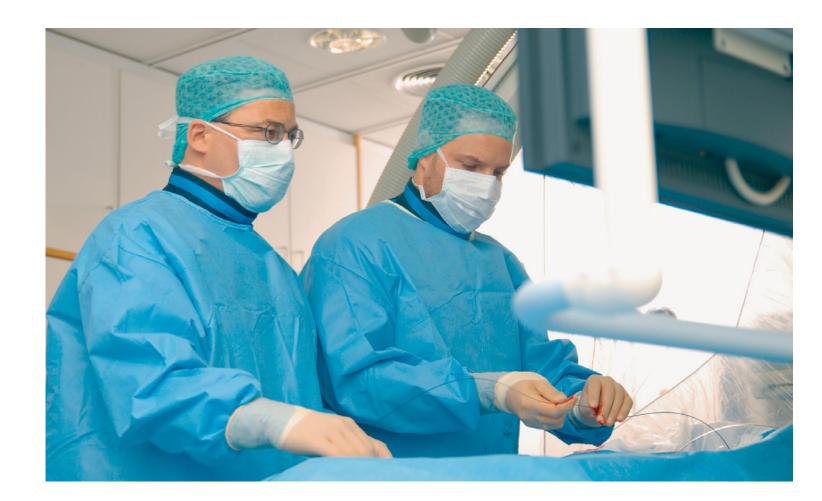
#### **Registration:**

Please contact your local Siemens Healthineers representative.



### Neuroradiology – ARTIS icono biplane

In-depth skills for MTs/RTs and physicians



Comprising 11 departments, 6 institutes, 1,400 beds and 6,000 staff members, the University Hospital Erlangen is driving advancement in several modern medical fields. The Department of Neuroradiology specializes in diagnostic examinations and minimally invasive therapies. Participants are introduced to Neuro interventions using an ARTIS icono biplane or ARTIS pheno system with *syngo* DynaCT.

The course also covers various therapeutic neuroradiological procedures.

#### **Typical examinations:**

- Diagnostic angiography, including temporal bone imaging (e. g. cochlear implants)
- Treatment of stroke, aneurysms, AVM/AVF, spine, hemorrhages, etc. with latest technology and devices
- Follow-up angiography with intra-venous syngo DynaCT
- Carotid artery stenting (rotational angiography and syngo DynaCT)

#### **Prerequisites:**

Advanced skills in angiography

#### Dates and language:

On request, English or German

#### **Organizer and location:**

University Hospital Erlangen
Department of Neuroradiology
Schwabachanlage 6
91054 Erlangen, Germany

#### Course size:

1–3 participants

#### Course fee:

On request

#### **Registration:**

Please contact your local Siemens Healthineers representative.



### Radiology and Interventional Therapy – Artis zee ceiling

In-depth skills for MTs/RTs and physicians



The Vivantes Hospital in Berlin Neukölln is a very modern facility with more than 1,200 beds, 20 medical specialty departments, 398 doctors and 875 nurses. The institution is equipped with an Artis zee ceiling-mounted system.

Participants learn how the system can be used to perform interventional radiology covering abdominal and peripheral interventions, chemoembolizations and certain hybrid procedures.

#### **Course content:**

- Interventional radiology, abdominal & peripheral procedures
- Mechanical vascular recanalization intraarterial lysis therapy
- Aspirational thrombectomy
- Interventional therapy for abdominal aortic aneurysms
- Radiofrequency ablation for liver and kidney tumors
- Transjugular Intrahepatic Portosystemic Shunt (TIPSS)
- Chemoembolization of liver tumors
- Embolizations of hemorrhages and tumors

#### Dates and language:

On request, English or German

#### Organizer and location:

Vivantes Klinikum Berlin-Neukölln Institute of Radiology and Interventional Therapy Rudower Str. 48 12351 Berlin, Germany

#### Course size:

1–3 participants

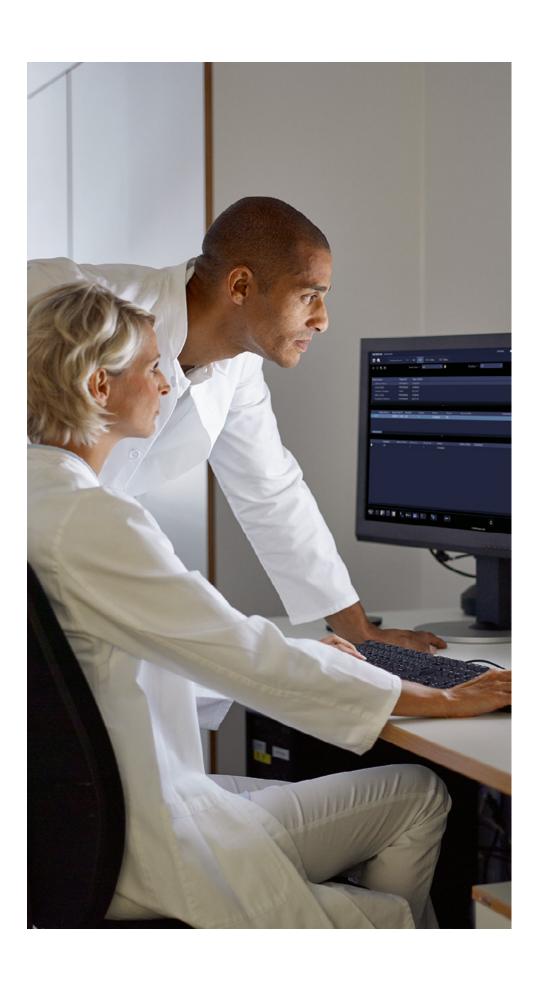
#### Course fee:

On request

#### Registration:

Please contact your local Siemens Healthineers representative.

# Imaging IT



		MTs / RTs*	Physicians	Physicists	ΙΤ	Basic skills	In-depth skills	Course type
Imaging IT								
> syngo.via – Intensive	New: Virtual	•	•			•		<u>.</u>
> syngo.via – Clin. Administration Training	New: Virtual	•	•		•		•	<u> </u>
> syngo.via – Cardiovascular Workflows CT a	and MR	•	•				•	Ţ
> syngo.via – IT Administrator Training					•		•	Ţ
> Basic Imaging Workshop		•	•		•	•		<b>+</b>
> syngo.plaza – Application Training		•	•			•		Ÿ
> syngo.plaza – IT Administrator Training					•		•	Ţ
> syngo.via and syngo.plaza – IT Admin. Tra	ining				•		•	Ţ



### syngo.via – Intensive

Basic skills for clinical users of *syngo*.via – MTs/RTs and physicians



On this two-day intensive virtual training course for clinical and future users, participants will be taught the basic theory and practical applications required for the clinical application of *syngo*.via (from version VB30). Participants will be taught the comprehensive basic use of *syngo*.via and general functioning of *syngo*.via. On this practical course participants will train about 50 percent of the time on virtual simulators and will consolidate their knowledge with practice exercises.

#### **Course content:**

• Basic principles of the patient list and its functions, e.g. work lists

**New: Virtual** 

- Workflows and how to handle them
- Routine work using the multi-modality application
   MM reporting
- Creating image findings
- Simple adaptation of report templates
- Explanation of help options

#### **Prerequisites:**

- Good knowledge of the clinical application of imaging systems, e.g. CT, MI, MR
- Familiarity with radiology workflows

#### **Technical requirements:**

- PC or laptop with mouse
- Headset with microphone
- Webcam (optional)
- Large monitor (preferably double monitor)



#### Dates and language:

Please see:

#### https://training.healthcare.siemens.com/

(+ technical check in advance\*)

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Virtual

#### Course size:

4–10 participants

#### Course fee:

€805

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

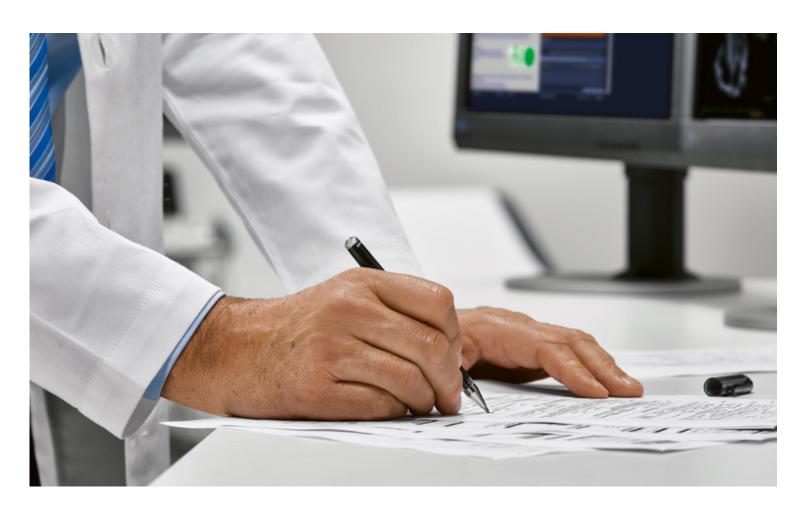
#### Course ID:

SY8VIABASV

### syngo.via – Clinical Administration Training

**New: Virtual** 

In-depth skills for experienced users of syngo.via with administrators' function



This two-day virtual classroom training will teach further theoretical knowledge of the clinical application of *syngo*.via (from version VB30) in connection with IT systems such as RIS/PACS and IT-admin-portal. Participants will spend about 40 percent of the available time training on servers and will consolidate their knowledge with exercises. This virtual application training course is a continuation of the course *syngo*.via – Intensive, but can also be attended separately.

#### Overview and clinical basic application:

- Deeper understanding of the patient list and special functions, e.g. how to correct demolists and data
- Reporting findings in *syngo*.via with different tools
- Configuration, e.g. client settings, presentation and behavior, exporting the report templates

#### IT configurations:

- Data and user management
- System configurations

#### **Prerequisites:**

• Experience with clinical use of imaging systems and clinical radiology workflows, basic knowledge of IT and DICOM data

#### **Technical requirements:**

- PC or laptop with mouse
- Headset with microphone
- Webcam (optional)
- Large monitor (preferably double monitor)



#### Dates and language:

Please see:

#### https://training.healthcare.siemens.com/

(+ technical check in advance\*)

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Virtual

#### Course size:

4–10 participants

#### Course fee:

€1,155

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

SY8VIAPL2V

### syngo.via - Cardiovascular Workflows CT and MR

In-depth skills for clinical users of syngo.via – MTs/RTs and physicians



This three-day course teaches foundation level theory and practical applications for the routine clinical analysis of cardiovascular CT and MR examinations using *syngo*.via (from Version VB30) and covers training on the required system settings. The course supports the effective application of *syngo*.via.

In this way radiology workflows for imaging complex cardiovascular CT and MR examinations can be optimized.

On this practice-oriented course participants will spend about 40 percent of the available time on allocated servers.

#### **Demonstration and practical applications:**

- Analysis of cardiology CT data
- Analysis of vascular CT data
- Analysis of cardiology MR data
- Analysis of vascular MR data

#### **Prerequisites:**

- Basic knowledge of *syngo*.via
- Experience with the clinical application of imaging systems, e.g. CT, MR and clinical radiology workflows



#### **Dates and language:**

Please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

4–12 participants

#### Course fee:

€1,730

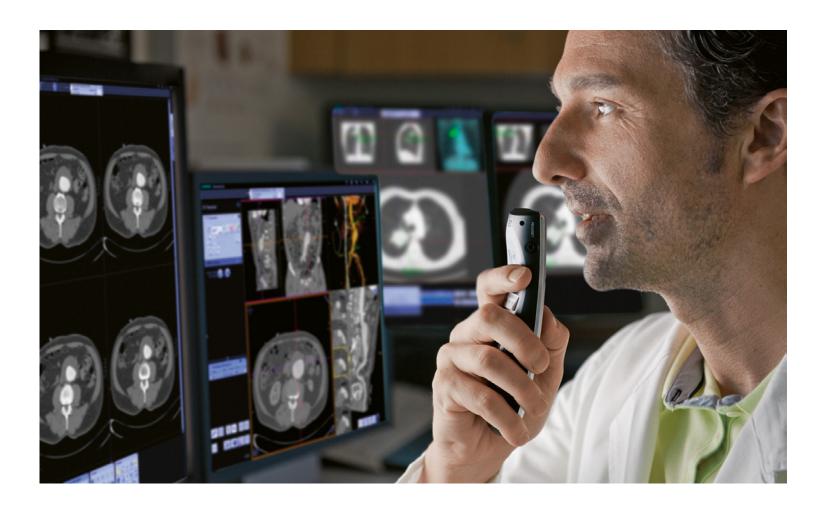
This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

**SY8VIAAUS** 

### syngo.via – IT Administrator Training

In-depth skills for IT administrators and employees



syngo.via is a software product for high-quality visualization of 2D/3D/4D datasets which have been acquired using various modalities. The close integration between syngo.via and the imaging modalities makes the review of datasets a part of your clinical routine. The server/client-based product allows datasets to be accessed for various modalities and provides users with modality- and disease-related viewing workflows.

After attending this two-day course, participants will be familiar with the workflow and implementation concept of *syngo*.via. Practical exercises such as the use of the Service User Interface and completing administrative tasks round off the course syllabus.

#### **Preparation:**

For preparation, the e-Learning course "syngo.via – IT Administrator Training" which is included in the course price is recommended. This course covers IT basics and gives learners a general introduction to clinical workflows.

#### **Course content:**

- System overview and software topology
- IHE, infrastructure and function view
- Installing the client software
- System and workflow configuration
- Introduction of the Service User Interface
- Introduction of troubleshooting tools



#### **Dates and language:**

Please see:

#### https://training.healthcare.siemens.com/

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers Global Training Center Allee am Röthelheimpark 3 91052 Erlangen, Germany

#### Course size:

4–12 participants

#### Course fee:

€1,360

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

SY8VIAITAD

### **Basic Imaging Workshop**

Basic skills for MTs/RTs, physicians and clinical administrators



This one-day *syngo*.via Imaging Basic workshop will provide basic client-server knowledge with the objective to train you as a clinical administrator or key user who intends to provide theoretical and practical training to other colleagues across all modalities. There will be several client-server based demo consoles to get acquainted with basic configuration options, different roles and the new user interface.

Workflow assignment and the basic workflow with its new application in 2D/3D imaging will also be covered. As a key user or clinical administrator, you will be able to create your own dedicated workflow and gain a cross modality overview of *syngo*.via.

#### **Course content:**

- *syngo*.via concept implementation and workflow management
- RIS-PACS integration models
- Hardware
- Image call up, advanced search, roles
- Basic workflow and workflow assignment
- UI and basic 2D/3D imaging on basic workflows

#### **Prerequisites:**

• Basic IT and DICOM skills, clinical workflow and experience in operating the *syngo*.via user interface



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

#### **Organizer and location:**

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1210 Vienna, Austria

#### Course size:

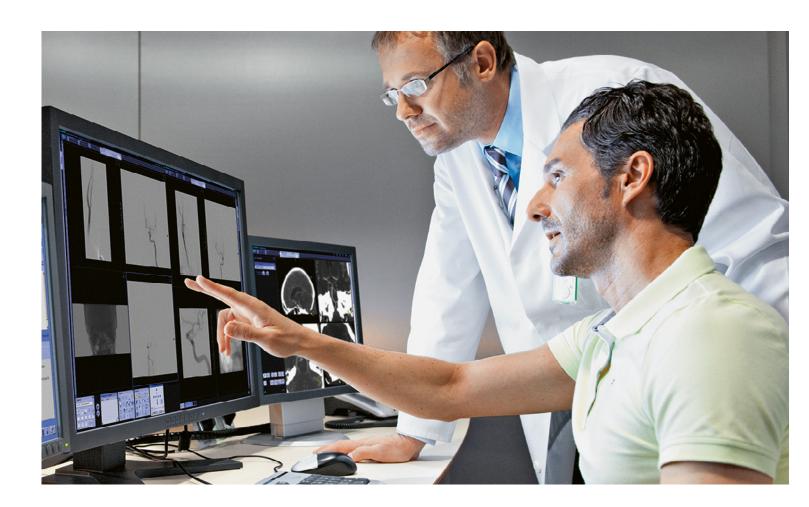
5–12 participants

#### Course fee:

€550 incl. VAT

### syngo.plaza – Application Training

Basic and in-depth skills for MTs/RTs, physicians, radiologists, clinical administrators



The objective of this three-day course is to give the participants the necessary theoretical knowledge and practical skills to routinely work with *syngo*.plaza. In addition the participant will get familiarized with the *syngo*. plaza settings and configurations for application.

#### Demonstration and exercises on:

- Patient Browser
- Viewer
- Filming
- Modality Worklist Scheduler

#### **Prerequisites:**

- Good basic knowledge in anatomy, cross sectional imaging and DICOM
- Basic understanding of clinical workflows and basic IT



#### Dates and language:

Please see:

https://training.healthcare.siemens.com/

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

Max. 8 participants

#### Course fee:

€2,730

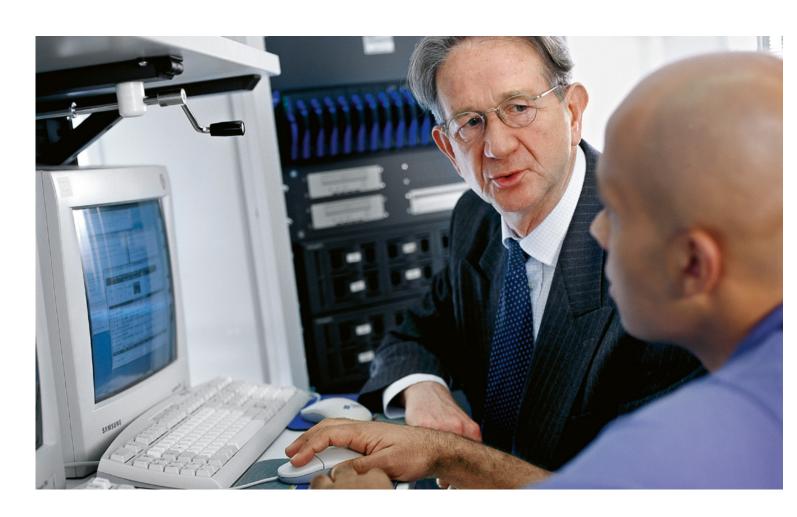
This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

SY8PLAZAPP

### syngo.plaza – IT Administrator Training

In-depth skills for system administrators



During this four-day course the participant will get a comprehensive overview of IT administration required to fully utilize, administrate and maintain a *syngo*.plaza system. In addition, the participant will have a solid understanding on how to provide users with first-level support.

#### Administration and first-level support:

- Backup and user management
- Audit management
- Central system configuration (DICOM nodes)
- Configuration tool (e.g. license handling)
- Message handling and first-level troubleshooting
- Configuration and handling of options like Mobile+, 3D+, and VNA+

#### **Prerequisites:**

- Understanding of clinical workflows and basic IT
- Knowledge about Microsoft Windows administration functions



#### Dates and language:

Please see:

https://training.healthcare.siemens.com/

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

Max. 8 participants

#### Course fee:

€3,680

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

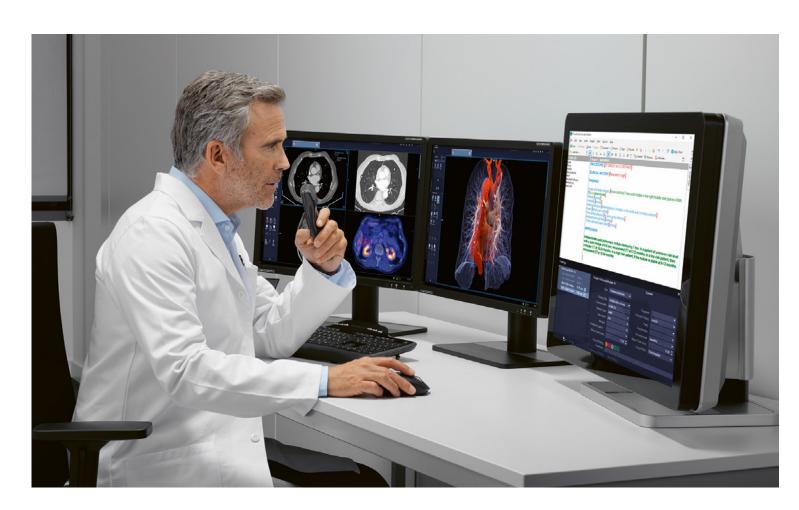
#### **Course ID:**

SY8PLAZAIT



# syngo.via & syngo.plaza – Combined IT Administration Training

In-depth skills for IT administrators working with syngo.via and syngo.plaza



During this course the participant will gain a comprehensive overview of the IT administrative skills required to fully utilize, operate and maintain a *syngo*.plaza system. They will also understand the workflow and implementation concept of *syngo*.via. In practical exercises the participant will learn to use the Service UI, while basic first-level support questions are also covered.

This course is suitable for IT administrators working with *syngo*.via and *syngo*.plaza, responsible for local user management, regular maintenance tasks and first-level service support.

#### Course content syngo.plaza:

- Backup and user management
- Audit management
- Configuration tool
- Message handling and first-level troubleshooting

#### Course content syngo.via:

- Overview
- Client installation
- Workflow configuration
- Service UI
- Troubleshooting tools

#### **Prerequisites:**

• Understanding of clinical workflow and basic IT knowledge, including Windows administration

#### **Dates and language:**

Please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers Global Training Center Allee am Röthelheimpark 3 91052 Erlangen, Germany

#### Course size:

Max. 8 participants

#### Course fee:

€2,000 plus VAT

#### Course ID:

SY8VIAPLAZ

# Molecular Imaging



	MTs / RTs*	Physicians	Physicists	ΙΤ	Basic skills	In-depth skills	Course type	
Molecular Imaging								
> SPECT Imaging Basics	•	•	•		•		M 🚣	
> SPECT Processing	•	•			•			
> SPECT/CT Imaging	•	•				•	Ą	
> Myocardial Perfusion SPECT: Corridor4DM	•	•				•	Ą	
> PET Imaging Basics	•	•	•		•			
> Biograph PET/CT Systems	•	•	•		•		<u> </u>	
> Advanced PET/CT Imaging	•	•	•			•	Ą	
> Operating the Radioisotope Delivery System Eclipse	•	•				•	Ą	



### **SPECT Imaging Basics**

Basic skills for MTs/RTs, physicians and physicists



Participants in this five-day course will learn how to operate a Symbia SPECT system, as well as the physics and technology behind the system and solid operational knowledge of MI applications. This includes an introduction to acquiring, processing and displaying patient data, as well as quality control. Practical implementation and a deeper operational knowledge are reinforced by hands-on exercises.

#### **Course content:**

- SPECT physics and technology
- System hardware controls
- MI applications user interface
- Basic principles of workflow structure
- How to acquire, process and display patient data
- Quality control procedures

#### **Prerequisites:**

Basic PC knowledge



#### **Dates and language:**

Please see:

https://training.healthcare.siemens.com/

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers Global Training Center Allee am Röthelheimpark 3 91052 Erlangen, Germany

#### Course size:

4–6 participants

#### Course fee:

€2,300

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MI2SPECBAS



### **SPECT Processing**

Basic skills for MTs/RTs and physicians



This five-day course provides participants with advice and hints for customizing SPECT system workflows to meet customer requirements. Participants gain extensive knowledge about creating and fine-tuning workflows and flexible displays. Many hands-on exercises give learners the opportunity to design, process and save various types of workflows. Basic image fusion exercises round off the topics covered in the course.

#### **Course content:**

- Modifying the MI Application user interface
- Designing workflows
- Creating Flexible Displays
- Troubleshooting MI Application workflows
- Configuring Data Selector
- Using Organ Processing
- Using Series Arithmetic
- Using Image Fusion

#### **Prerequisites:**

• At least three months working experience with MI APPS user interface or SPECT Imaging Basics class



#### Dates and language:

Please see:

#### https://training.healthcare.siemens.com/

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

4–6 participants

#### Course fee:

€2,300

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MI2SPECPRO



### SPECT/CT Imaging

In-depth skills for MTs/RTs and physicians



This four-day training course introduces learners to SPECT/CT using a Symbia system. Participants perform various SPECT/CT examinations using different energy windows. In addition, course work includes practical exercises on generating and modifying SPECT/CT acquisition and processing workflows.

#### **Course content:**

- Operating a SPECT/CT system
- SPECT/CT safety considerations demonstrated on a Symbia Intevo system
- SPECT/CT acquisition, evaluation and display
- Modifying SPECT/CT acquisition and evaluation workflows
- Using Image Fusion
- Performing CT quality assurance
- Performing Sensitivity Calibration
- Performing xSPECT acquisition and processing

#### **Prerequisites:**

• At least three months working experience with MI APPS user interface or SPECT Imaging Basics class



#### Dates and language:

Please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

4–6 participants

#### Course fee:

€1,840

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MI2SPECTCT

### Myocardial Perfusion SPECT: Corridor4DM

In-depth skills for MTs/RTs and nuclear medicine physicians



Myocardial perfusion SPECT has established itself as a valuable procedure for primary diagnosis and for determining the severity of coronary heart disease. This one-day training is given so that participants are able to independently complete such routine work as the quantification of myocardial perfusion and the evaluation of gated SPECT data.

#### Workshop instructor:

Prof. Dr. Dr. Wolfgang Schäfer,
Head of Department of Nuclear Medicine,
Maria Hilf Clinics Mönchengladbach, Germany

#### **Course content:**

- Fundamentals of myocardial perfusion SPECT
- Acquisition and reconstruction protocols
- Evaluation and display of myocardial perfusion SPECT with Corridor4DM
- Clinical case studies/prognostic value of the diagnostic findings
- Fundamentals of gated SPECT
- Evaluation and display of gated SPECT
- Value of highlighted parameters (EDV, ESV, LEVF, regional wall motion)
- Clinical case studies
- Hands-on workshops

#### **Prerequisites:**

• Experience working in quantitative coronary evaluation



#### Dates and language:

Please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

4–10 participants

#### Course fee:

€460

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

MI84DMSPEC



### PET Imaging Basics

Basic skills for MTs/RTs, physicians and physicists



The learning objective of this five-day course is to introduce participants into Positron Emission Tomography. The class covers the medical, physical and technological background of PET imaging.

#### **Course content:**

- Medical background of PET imaging
- Basic nuclear physics
- Radiation protection
- PET technology (data acquisition, reconstruction, quantification, corrections)
- FDG imaging basics

#### **Prerequisites:**

• Basic knowledge about medical imaging modalities



#### Dates and language:

Please see:

#### https://training.healthcare.siemens.com/

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

4–6 participants

#### Course fee:

€2,300

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MI2PETBAS

### Biograph PET/CT Systems

Basic skills for MTs/RTs, physicians and physicists



The objective of this five-day course is to learn how to operate a Biograph PET/CT system. It enables participants to carry out routine daily tasks such as quality assurance and basic image acquisition and processing. Practical exercises on a Biograph PET/CT system and image processing workplaces are included.

#### **Course content:**

- Biograph PET/CT features
- Hardware controls
- Software overview
- Performing basic PET/CT acquisition protocols
- Basic PET/CT processing
- Quality control procedures

#### **Prerequisites:**

• Basic knowledge about PET imaging



#### **Dates and language:**

Please see:

https://training.healthcare.siemens.com/

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen, Germany

#### Course size:

4–6 participants

#### Course fee:

€2,550

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MI2BIOGRAP



### Advanced PET/CT Imaging

In-depth skills for MTs/RTs, physicians and physicists



Within this five-day course you will improve your knowledge about PET image quality. Participants will learn to use advanced PET/CT List mode protocols which can include cardiac and respiratory gating as well as dynamic acquisition. In addition you will get information about basic processing of such studies including hands-on.

#### **Course content:**

- PET image quality
- PET in Oncology, Cardiology and Neurology
- PET List mode imaging
- Dynamic PET/CT protocols
- Cardiac gated PET/CT protocols
- Respiratory gated PET/CT protocols
- Respiratory gating hardware

#### **Prerequisites:**

• Knowledge about PET imaging and Biograph PET/CT systems



#### **Dates and language:**

Please see:

#### https://training.healthcare.siemens.com/

#### Organizer:

Siemens Healthcare GmbH

#### Location:

Siemens Healthineers Global Training Center Allee am Röthelheimpark 3 91052 Erlangen, Germany

#### Course size:

4–6 participants

#### Course fee:

€2,300

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MI3BIOADV



### Operating the Radioisotope Delivery System Eclipse

In-depth skills for PETNET pharmacy staff – MTs/RTs and physicians



This three-day course is designed for operators of Eclipse RD, HP, and ST cyclotron systems, with a focus on F-18 production. It covers the safe and efficient day-to-day operation of the Eclipse system for normal clinical and production pharmacy use.

The training includes safety instructions applicable to operations, a simplified theory-of-operation, and intensive, supervised hands-on experience with computer simulators and operating the Eclipse cyclotron.

#### **Prerequisites:**

Students must be trained and badged as Radiation Workers, and have ES&H training appropriate for the work. Students should have a basic grasp of pharmacy operations and routine as well as the basic physics of the atom prior to attending this class.

#### Course content:

Covering the safe and efficient operation of the Eclipse systems for normal pharmacy operations. This training does not cover in-stallation of the Eclipse cyclotron, nor does it cover PET tracer chemistry units.



#### Dates and language:

Please see:

https://training.healthcare.siemens.com/

#### Organizer and location:

Siemens Molecular Imaging 810 Innovation Drive Knoxville, TN 37932 USA

#### Course size:

3–6 participants

#### Course fee:

€3,300 incl. VAT

#### Course ID:

MI8ECLIPS



## Magnetic Resonance Imaging



	MTs / RTs*	Physicians	Physicists	IT	Basic skills	In-depth skills	Course type
Magnetic Resonance Imaging							
> BioMatrix & GO Technologies – Using Them Effectively	•	•	•		•		Αψ
> Concepts and Application of MR Imaging	•	•	•			•	Ą
> MR Image Quality and Optimization	•	•	•				Ą
> MR Image Quality and Optimization extended	•	•				•	Ą
> MRI – Better Understanding 3T Imaging	•	•				•	Ą
> MR Protocol Optimization	•	•				•	Ą
> Cardiac Imaging in MRI	•	•				•	<b>+</b>
> MRI Refresher Workshop	•	•				•	<b>+</b>
> MR Neuroradiological and Musculoskeletal Imaging	•	•				•	<b>+</b>
> MRI – Breast Workshop		•				•	<b>+</b>
> MRI – MDCT Abdomen	•	•				•	<b>+</b>
> MRI – Prostate Workshop		•				•	<b>+</b>
> Advanced Imaging MR Workshop	•	•				•	1
> MR Observership	•	•	•		•	•	(+,



		MTs / RTs*	Physicians	Physicists	IT	Basic skills	In-depth skills	Course type
Magnetic Resonance Imaging								
> Essential operations of MR scanners	New	•	•			•		<u>.</u>
> UHF-7T Ultra High Field MR scanner	New		•	•			•	<u>.</u>
> Biograph mMR	New	•	•	•		•	•	<u>.</u>
> Postprocessing for MR	New		•	•	•	•	•	

### BioMatrix & GO Technologies – Using Them Effectively

Basic skills for MTs/RTs and physicians



On this three-day course participants will be taught about the functions and operation of BioMatrix & GO MRT systems in more detail. You will practice using specific hardware components of the system and learn how to use individual components such as the new MRT coils or patient bed. Participants will also learn how to use new, exclusive system applications and gain insight into their analysis, based on the latest software platform.

On this very application-oriented course, practical training includes about 50 percent of the time on the scanner and 20 percent on simulators.

#### **Course content:**

- Product overview of BioMatrix & GO MRT systems
- New MRT coils, new patient bed, Select, Intercom
- Use of known and new MR applications of BioMatrix & GO MRT systems
- Theoretical and practical introduction to the new *syngo* interface
- Image viewing and image postprocessing using View&GO
- Dot Engines

#### **Prerequisites:**

• Experience with MAGNETOM MRT systems



#### Dates and language:

On request or please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Imaging Science Institute
University Hospital Erlangen
Ulmenweg 18
91054 Erlangen, Germany

#### Course size:

4–10 participants

#### Course fee:

€1,250

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

MR8BIOMAT

### Concepts and Application of MR Imaging

In-depth skills for MTs/RTs and physicians



Magnetic resonance imaging currently provides a broad spectrum of examination protocols and measurement techniques. This comprehensive overview explains the basic concepts of MRI and will help you coordinate a large number of sequences and capturing methods, thus giving you a deeper understanding of MR imaging.

Physical concepts are directly connected to their clinical applications. You will be able to apply, discuss and deepen your understanding of the theory in joint practical sessions with volunteers.

#### **Course content:**

- MR safety
- Concepts of MRI: Signal, contrast, image coding
- Measurement techniques and image parameters
- Concepts of rapid imaging
- Techniques for reducing movement
- Image quality and artefacts
- Practical measurements on volunteers



#### Dates and language:

On request or please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Imaging Science Institute
University Hospital Erlangen
Ulmenweg 18
91054 Erlangen, Germany

#### Course size:

6–8 participants

#### Course fee:

€1,680

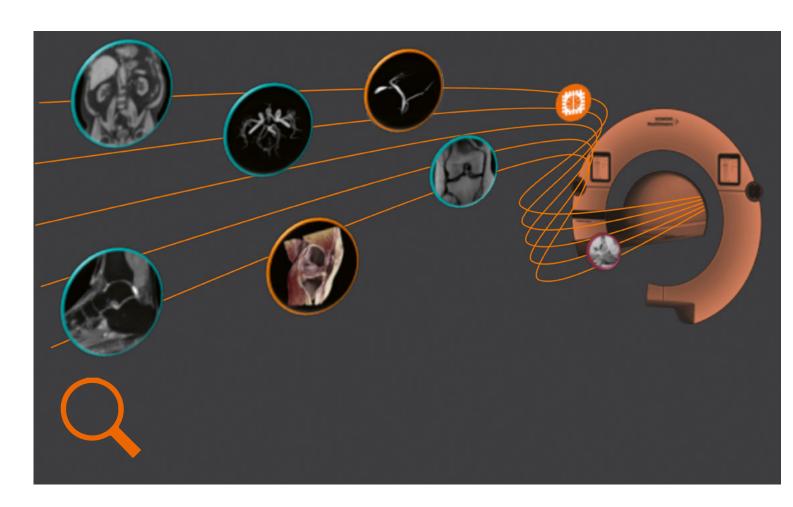
This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MR8MRINTRO

### MR Image Quality and Optimization

In-depth skills for MTs/RTs and physicians



The image quality is a key factor for making a rapid and informative diagnosis. The aim should be optimal image quality and short examination times to optimize the process. How can we influence the image quality? What does a good image consist of? This three-day course should provide answers to these questions. Participants will gain an overview of protocol parameters and their influence on image quality.

Enough time will be spent on MAGNETOM systems (1.5T and 3T) to get experience of different parameter settings and develop strategies for improving the image quality and optimizing protocols by using practical case studies. The course is very practice-oriented – participants will spend about 70 percent of the course on the scanner.

#### **Course content:**

- Protocol parameters and the interaction thereof
- Physiological, physical and systemic artefacts
- Protocol optimization
- Motion management

#### **Prerequisites:**

• Experience in MRT



#### Dates and language:

On request or please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Imaging Science Institute
University Hospital Erlangen
Ulmenweg 18
91054 Erlangen, Germany

#### Course size:

Max. 8 participants

#### Course fee:

€1,730

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MR8BQOPT

### MR Image Quality and Optimization extended

In-depth skills for MTs/RTs and physicians



This four-day course is an extended version of the course "MR Image Quality and Optimization". How can we influence the image quality? What does a good image consist of? This intensive training with the additional in-depth content of Fat Saturation Techniques, VAT, WARP, SEMAC, SMS (Simultaneous Multi Slice) and Compressed Sensing will provide answers to these questions. The participants will gain an overview of protocol parameters and their influence on image quality.

Enough time will be spent on MAGNETOM systems (1.5T and 3T) to get experience of different parameter settings and develop strategies for improving the image quality and optimizing protocols by using practical case studies. The course is very practice-oriented – participants will spend about 70 percent of the course on the scanner.

#### **Course content:**

- Interaction of Protocol parameters
- Physiological, physical and systemic artefacts
- Protocol optimization
- Motion management
- Fat Suppresion Techniques
- VAT, WARP, Semac
- SMS (Simultaneous Multi Slice)
- Compressed Sensing

#### **Prerequisites:**

Experience in MRT



#### Dates and language:

On request or please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Imaging Science Institute
University Hospital Erlangen
Ulmenweg 18
91054 Erlangen, Germany

#### Course size:

Max. 8 participants

#### Course fee:

€2,310

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

MR8BQOPEXT

### MRI – Better Understanding 3T Imaging

In-depth skills for users of MAGNETOM Tim+Dot-systems – MTs/RTs and physicians



Image quality is a key factor when it comes to making a rapid and informative diagnosis. What benefits does a 3T system offer in terms of image quality and measuring time? What challenges does a 3T system pose? How do I optimize 3T use in my daily routine and what clinical applications benefit the most from it? This three-day intensive course aims to answer these questions.

The course has a strong practical focus – participants will spend about 50 percent of the course time on MAGNETOM 3T systems and carry out measurements on volunteers to gain experience.

#### **Course content:**

- Protocol parameters and adjustments when using 3T
- 3T image quality and optimization:
- Signal to noise
- Contrasts
- Spatial and temporal resolution
- Speed
- 3T challenges:
- Specific Absorption Rate (SAR)
- Chemical shift
- Susceptibility
- Dielectric effects

#### **Prerequisites:**

Experience in MRT



#### **Dates and language:**

On request or please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Imaging Science Institute
University Hospital Erlangen
Ulmenweg 18
91054 Erlangen, Germany

#### Course size:

Max. 8 participants

#### Course fee:

€1,730

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### Course ID:

MR8TESINT

### **MR Protocol Optimization**

In-depth skills for MTs/RTs and physicians, radiologists



It is all about high image quality to provide the most accurate diagnosis possible. This one-day workshop broadens the participants' skills regarding the different parameters and sequence techniques, and their interaction in regard to this relevant factor. Siemens Healthineers experts combine lectures and demonstrations on the simulator to provide a comprehensive understanding of this topic.

#### **Course content:**

- Review physical principles and safety aspects of MRI
- Contrast, time and resolution and their complex interaction
- Advanced sequences and parallel imaging techniques
- Defining several parameters and rating the interaction between them (using a simulator for demonstration)

#### **Prerequisites:**

• Basic knowledge of Magnetic Resonance Imaging



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

#### Organizer and location:

Siemens Healthcare
Diagnostics GmbH
Siemensstr. 90
1210 Vienna, Austria

#### Course size:

Max. 25 participants

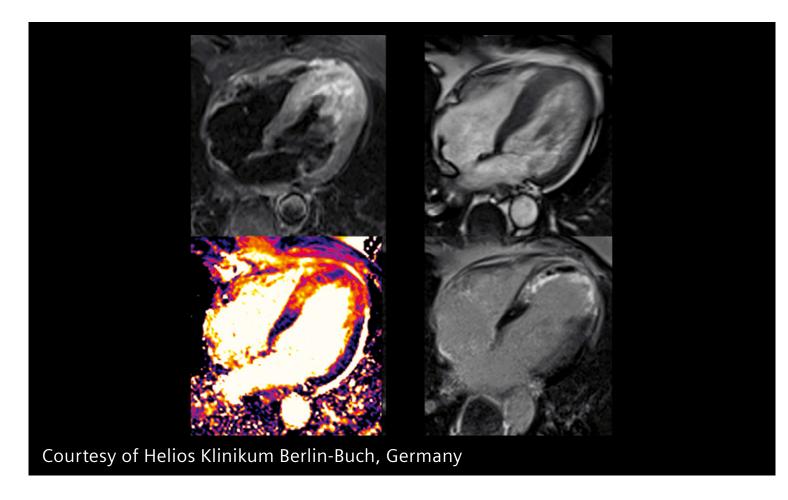
#### Course fee:

€470 incl. VAT



### Cardiac Imaging in MRI

In-depth skills for MTs/RTs and physicians, radiologists, cardiologists



In recent years, cardiac MRI has evolved into a key procedure in diagnostic and functional cardiac imaging. These imaging procedures are proven and reliable predictive techniques for diagnosing a wide range of cardiovascular pathologies. The objective of this course is to give users more confidence as they carry out MRI cardiac examinations.

Under the expert direction of the University Hospital Erlangen and Siemens Healthineers, participants have the opportunity to perform cardiac measurements on volunteers and to observe examinations on real patients in clinical settings.

#### Workshop instructor:

PD Dr. Rolf Janka, Radiological Institute, University Hospital Erlangen

#### **Course content:**

- Fundamentals of MRI physics
- MRI anatomy of the cardiovascular system
- Examination techniques and evaluation strategies for cardiac MRI
- Protocol optimization for cardiac MRI examinations
- Functional cardiac imaging
- Practical training on different MRI systems using clinical cases

#### **Prerequisites:**

• Advanced knowledge in MRI





#### Dates and language:

On request or please see:

https://training.healthcare.siemens.com/

#### **Organizer:**

Siemens Healthcare GmbH

#### Location:

Imaging Science Institute
University Hospital Erlangen
Ulmenweg 18
91054 Erlangen, Germany

#### Course size:

6–12 participants

#### Course fee:

€1,800

This course is tax-exempt in accordance with § 4 No.21 UStG (German VAT law)

#### **Course ID:**

MR8ADVCARD



### MRI Refresher Workshop

Basic and in-depth skills for MTs/RTs and radiologists



This workshop complements the "State-of-the-art MR technology and applications" course. Participants are already using MR and would like to refresh their basic knowledge and learn about new developments. The following topics will be covered: an update on the basic structure of a state-of-the-art MR scanner from a technical perspective and on different, new designs and field strengths; relevant safety aspects for MR scanners, operating staff and patients, and a refresher on basic physical

principles – how an MR image is formed, different weightings, state-of-the-art sequencing techniques with and without contrast media, rapid sequencing techniques and basic measurement parameters.

#### **Course content:**

- Basic principles of MR imaging and weightings, contrast and resolution
- Differences between turbo spin echo and gradient echo sequences
- Selection of sequencing techniques for rapid imaging and for dynamic imaging
- Parameter differences between 1.5T and 3T
- Fat saturation techniques and contrast media
- Structure, components of an MR system and differences
- Safety aspects of the magnetic field
- Visualization of MR images on syngo.via workstations

#### **Prerequisites:**

• Basic knowledge of MR imaging

#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

#### Organizer and location:

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1090 Vienna, Austria

#### Course size:

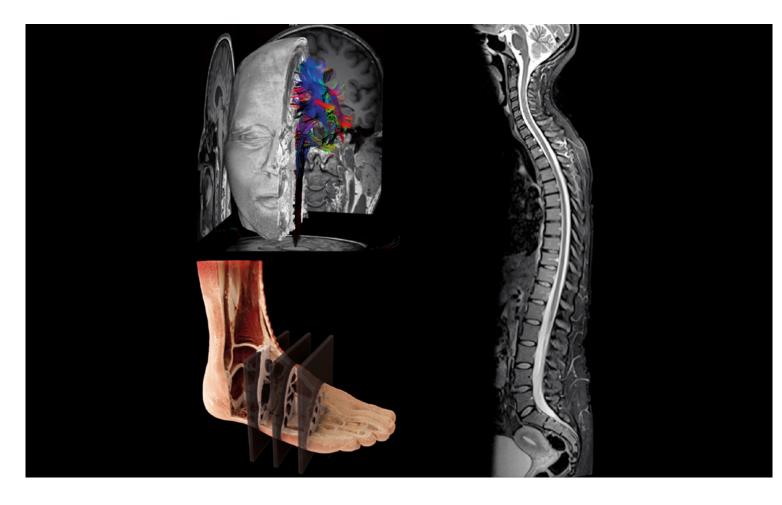
5–12 participants

#### Course fee:

€550 incl. VAT

### MR Neuroradiological and Musculoskeletal Imaging

In-depth skills for MTs/RTs and physicians, radiologists



These two one-day intensive courses on MRI scanners in neuro-radiological and musculoskeletal diagnosis cover topics such as physical prerequisites, predictive clinical value and examination protocols as well as commonly used standard evaluations. The course is designed for participants who wish to refresh their existing basic knowledge, extend their knowledge and enhance their skills through hands-on instruction.

#### **Course content:**

- Overview of high-field safety precautions
- Performing an MRI examination: patient preparation, introduction to the user interface
- Standard evaluations: spectroscopy, perfusion/diffusion tensor including hands-on sessions

#### **Module 1: Neuroimaging**

• Protocols for multimodal tumor imaging and disorders of white substance

#### Module 2: Musculoskeletal imaging

- Protocols for examining joints and the spine
- Advanced techniques for biochemical imaging and more
- Lectures on key topics

#### **Prerequisites:**

- Basic knowledge of MR Imaging
- Experience with operating the *syngo*.via user interface and image post-processing



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

#### **Organizer and location:**

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1090 Vienna, Austria

#### Course size:

5–12 participants

#### Course fee:

€550 incl. VAT per module

### 10 DFP Credits

### MRI – Breast Workshop

In-depth skills for physicians and radiologists



This one-day workshop includes scientific lectures as well as *syngo*.via user interface presentations with workshop units for breast MRI. In addition to the diagnosis and treatment of breast carcinomas, participants will discuss pathology in terms of characteristics and risk. Further topics include examination planning, patient preparation, sequence technique and executing routine examination protocols, as well as MR-targeted biopsy.

The workshop avoids clinically irrelevant topics and focuses on structured, evidence-based case diagnostics.

#### **Course content:**

- Indication, implementation and diagnosis
- Functionality of the user interface, for example, for diffusion evaluation
- Analysis of selected cases

#### **Prerequisites:**

• Experience with MRI and operating the *syngo*.via user interface

#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

#### Organizer and location:

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1090 Vienna, Austria

#### Course size:

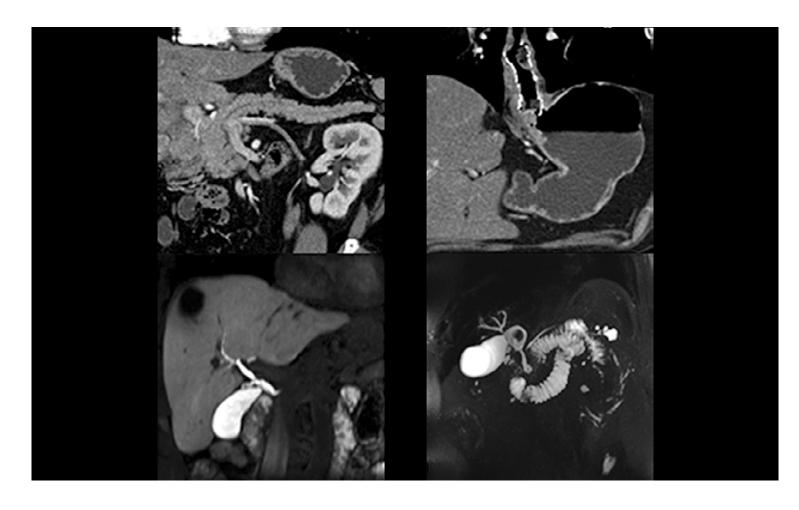
5–12 participants

#### Course fee:

€750 incl. VAT

### MRI – MDCT Abdomen

In-depth skills for MTs/RTs and physicians, radiologists



The workshop consists of scientific lectures and *syngo*.via user interface presentations, including hands-on units in three independent modules. The course is given in state-of-the-art seminar rooms equipped with *syngo*.via client-server based workplaces. Small groups with no more than twelve participants ensure optimal learning results.

Learners who attend this workshop can focus intensively on new techniques and actively share their experience without being distracted by daily work.

#### **Course content:**

- Choosing CT versus MRI
- Examination protocols, contrast media, image quality
- Benefits of advanced sequences
- Diagnosis of various diseases
- Correct interpretation of clinical condition based on radiological findings
- Presentation and training with syngo.via workflows
- Workstation training in small groups

#### **Course module:**

- Pancreas workshop: 1 day
- Liver and Biliary Tract workshop: 1 day
- Gastrointestinal Tract workshop: 1 day

#### **Prerequisites:**

• Experience with MRI/MDCT



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

#### Organizer and location:

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1090 Vienna, Austria

#### Course size:

5–12 participants

#### Course fee:

€550 incl. VAT per module

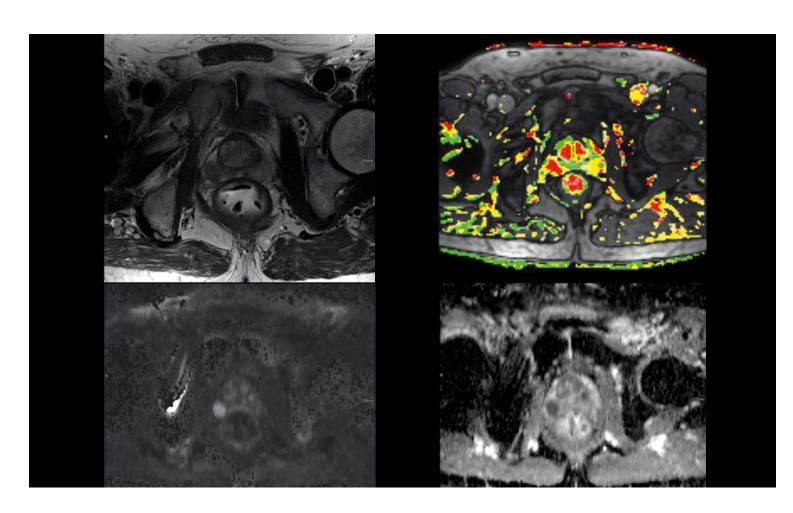
#### **Special offer:**

Book 3 for the price of 2!

# DFP Credits

### MRI – Prostate Workshop

In-depth skills for physicians and radiologists



This one-day workshop refreshes prostate MRI knowledge and includes scientific lectures as well as presentations of the *syngo*.via user interface and hands-on training. Presentations like patient preparation and correct examination protocol planning will lead to a correct interpretation of radiological findings. The course is equipped with *syngo*.via client-server based workplaces. Small groups with no more than 12 participants ensure optimal learning results.

#### **Course content:**

- Diagnoses and therapy of prostate cancer
- Technique of multi-parametric MRI
- PI-RADS V2-systemic and appliance
- Pitfalls of prostate MRI
- Characteristics of PZ and TZ in MRI
- Pathology of the prostate gland
- MRI-guided biopsy of the prostate gland
- 4 Hands-on sessions

#### **Prerequisites:**

• Experience with MRI and operating the *syngo*.via user interface

#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

#### Organizer and location:

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1090 Vienna, Austria

#### Course size:

5–12 participants

#### Course fee:

€750 incl. VAT

# Advanced Imaging MR Workshop

In-depth skills for *syngo*.via user – MTs/RTs and physicians, radiologists



This one-day *syngo*.via Imaging Workshop in Magnetic Resonance Imaging will provide *syngo*.via users with advanced MR workflow knowledge, evaluation and documentation principles in theoretical and practical training sessions on client-server based demo consoles. Additionally, there will be an update to recent software version changes to get acquainted with news on basic configuration options, different roles and the user interface.

The main topic of the course is to assure advanced visualization knowledge in MR Imaging throughout all MR Engines.

#### **Course content:**

- Update software "state-of-the-art"
- MR Vascular
- MR Cardiac
- MM Oncology
- MR Prostate
- MR Breast
- MR Neurology
- MR Spectro Composing
- MR specific Workflows

#### **Prerequisites:**

• Basic IT and DICOM skills, clinical workflow and basic 2D/3D imaging skills



#### Dates:

Please see:

siemens-healthineers.com/at/education/ med-imag-therapy

#### Language:

German

### **Organizer and location:**

Department of Biomedical Imaging, Image-Guided Therapy and Nuclear Medicine Währinger Gürtel 18–20 1090 Vienna, Austria

#### Course size:

5–12 participants

#### Course fee:

€550 incl. VAT per module



# MR Observership

Basic and in-depth skills for MTs/RTs and physicians, radiologists, physicists



An Observership is a program in the radiology department of Siemens Healthineers cooperation partners. Participants can improve personal knowledge and skills by observing the clinical workflow of the host location, including workflows, examination procedures and reporting as well as software applications and scanner protocols. The program focuses on the daily clinical routine in a hospital.

## **Observership content:**

General MRI, Cardiology, Neurology, Oncology, Musculoskeletal Imaging, Pediatrics, Men's/Women's Health, intra-operative MRI Neurosurgery, MR/PET, depending on the host location

## Dates and language:

On request, English

## Organizer:

Siemens Healthineers Allee am Röthelheimpark 2 91052 Erlangen, Germany

## **Observership instructor:**

Multinational Observership sites

#### Course size:

1–2 participants

## **Course length:**

2–10 days

#### Course fee:

On request

## **Registration:**

Please contact your local sales representative.



## Essential operations of MR scanners

New



If you want to explore more potential of your system you will need the support of dedicated, experienced and highly qualified experts. To keep pace with the progressive innovations and applications in the MRI field, it is crucial that you can rely on the expertise of our specialist. According to your wishes we can offer you a mixture between theory and practice.

## Book your clinical application expert!

All clinical users, onsite scientists, application specialists, business managers are welcome.

### Bookable sessions with hands-on training\*:

- Introduction to Numaris: NumarisX philosophy and the View&GO
- View&Go: learning to work with View&Go
- Dot Cockpit Basic: learning to work with Dot Cockpit
- Demo of the Dot Engines: learning to work with Dot Engines
- Image quality at 3T: learn how MR field strength (1.5T vs 3T) influences images, protocols, procedures
- Analytical explanation of parameters in protocols
- Artifacts and troubleshooting
- Spectroscopy basics
- Customization of one selected Dot Engine directly on your system
- Protocol customization directly on your system

Dates:

On request

Length:

1-4 hours

Language:

English

Organizer:

Siemens Healthcare GmbH

Course fee:

€250/h\*\*

<sup>\*</sup>All sessions can be customized



# UHF-7T Ultra High Field MR scanner

New



If you want to explore more potential of your system you will need the support of dedicated, experienced and highly qualified experts. To keep pace with the progressive innovations and applications in the MR field, it is crucial that you can rely on the expertise of our specialist. According to your wishes we can offer you a mixture between theory and practice.

## **Book your clinical application expert!**

All clinical users, onsite scientists, application specialists, business managers are welcome.

#### **Bookable lectures:**

- Introduction to UHF-7T MR Physics: suitable for people with different backgrounds (MR physicists, neuroscientists, MR technologists)
- Image quality, challenges and protocol optimization techniques
- Introduction to parallel transmission technology (pTx) and techniques
- Introduction to Sodium (23Na) imaging and Phosphorus (31P) spectroscopy at 7T

Dates:

On request

Length:

1–1,5 hours

Language:

English

Organizer:

Siemens Healthcare GmbH

Course fee:

€250/h\*



# Biograph mMR

New



If you want to explore more potential of your system you will need the support of dedicated, experienced and highly qualified experts. To keep pace with the progressive innovations and applications in the MR field, it is crucial that you can rely on the expertise of our specialist. According to your wishes we can offer you a mixture between theory and practice.

## Book your clinical application expert!

All clinical users, onsite scientists, application specialists, business managers are welcome.

## Bookable sessions with hands-on training\* and lectures:

- Introduction into Biograph mMR: overview on clinical Biograph mMR applications
- *syngo*.via MR oncology workflow customizing for Biograph mMR: in an interactive session you learn how to work and customize the reading workflow of a mMR

Dates:

On request

Length:

1–2 hours

Language:

English

Organizer:

Siemens Healthcare GmbH

Course fee:

€250/h\*\*

<sup>\*</sup>All sessions can be customized



# Postprocessing for MR

New



If you want to explore more potential of your system you will need the support of dedicated, experienced and highly qualified experts. To keep pace with the progressive innovations and applications in the MR field, it is crucial that you can rely on the expertise of our specialist. According to your wishes we can offer you a mixture between theory and practice.

## Book your clinical application expert!

All clinical users, onsite scientists, application specialists, business managers are welcome.

## Bookable sessions with hands-on training\*:

- Basics of syngo.via MR
- syngo.via MR Breast / Brevis
- syngo.via MR Prostate / Tissue4D
- syngo.via MR Neuro3D
- syngo.via MR Neurology
- syngo.via MR Oncology
- *syngo*.via MR Oncology workflow customizing for Biograph mMR
- syngo.via MR Cardiac Analysis
- syngo.via Spectroscopy Basic
- syngo.via Spectroscopy Advanced

Dates:

On request

Length:

1–2 hours

Language:

English

Organizer:

Siemens Healthcare GmbH

Course fee:

€250/h\*\*

<sup>\*</sup>All sessions can be customized



# Mammography



		MTs / RTs*	Physicians	Physicists	IT	Basic skills	In-depth skills	Course type
Mammography								
> Advances in Breast Imaging	New	•	•			•		

# Advances in Breast Imaging

New

## Online training



Join five clinical experts - experienced radiologists and scientists – in breast imaging on an eight-hour educational journey ranging from wide-angle breast tomosynthesis (wa-DBT) through AI-based CAD to titanium contrast-enhanced mammography (TiCEM)!

Look forward to a diversified combination of scientific presentations, clinical practice experiences and hints, and over 50 case discussions.

#### **Course content:**

- Technical background and image quality of wa-DBT
- Clinical basics
- Guidance on how to read
- Morphology of lesions in 2D and 3D
- Practical tips for using DBT biopsy
- TiCEM: A functional imaging method
- DBT in screening including Al-based CAD
- Short tests for repetition and self-check
- Course reviews and final tests

## **Prerequisites:**

- Experiences with 2D mammography
- Basic knowledge in breast imaging

## Length and language:

8 hours, English

### Language:

German

## Organizer:

Siemens Healthcare GmbH

#### Course fee:

€0



# Radiography

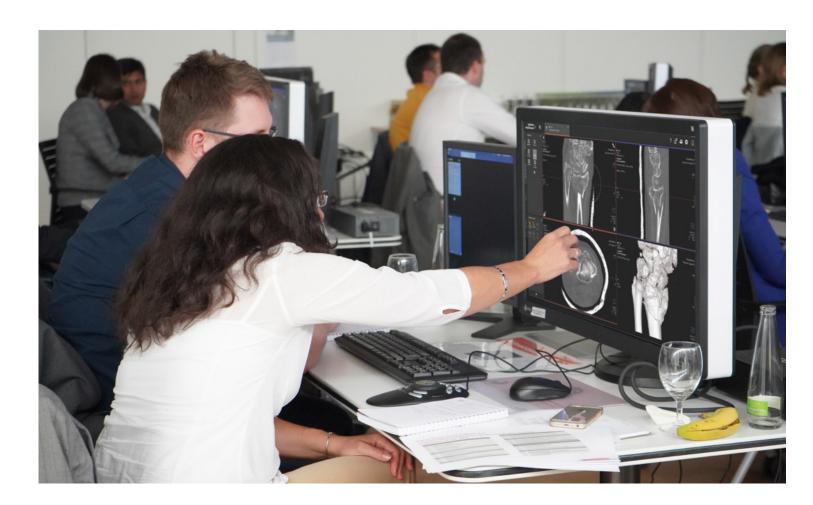


		MTs / RTs*	Physicians	Physicists	IT	Basic skills	In-depth skills	Course type
Radiography								
> Twin Robotic X-Ray with Multitom Rax	New	•	•			•		

# Twin Robotic X-Ray with Multitom Rax

New

## Online training



In-depth presentations and films from clinical routine are supplemented with thorough case discussions. We will talk about the use of "Real 3D" and "True-to-Scale Body Scan" for musculoskeletal imaging based on scientific studies and clinical experiences incl. several case discussions.

The goal of the training is to get familiar with the features Multitom Rax has to offer and become curious, or even enthusiastic about working with it. The WBT targets radiologists, trauma surgeons and orthopedists.

#### **Course content:**

- The technology behind Real 3D and True2Scale
- Musculoskeletal imaging with Multitom Rax in the clinical routine
- Real 3D for lying examinations of the extremities
- Fluoroscopy in orthopedic imaging

## **Prerequisites:**

• Basic knowledge in musculoskeletal imaging

## Length:

4 hours

## Language:

English

## Organizer:

Siemens Healthcare GmbH

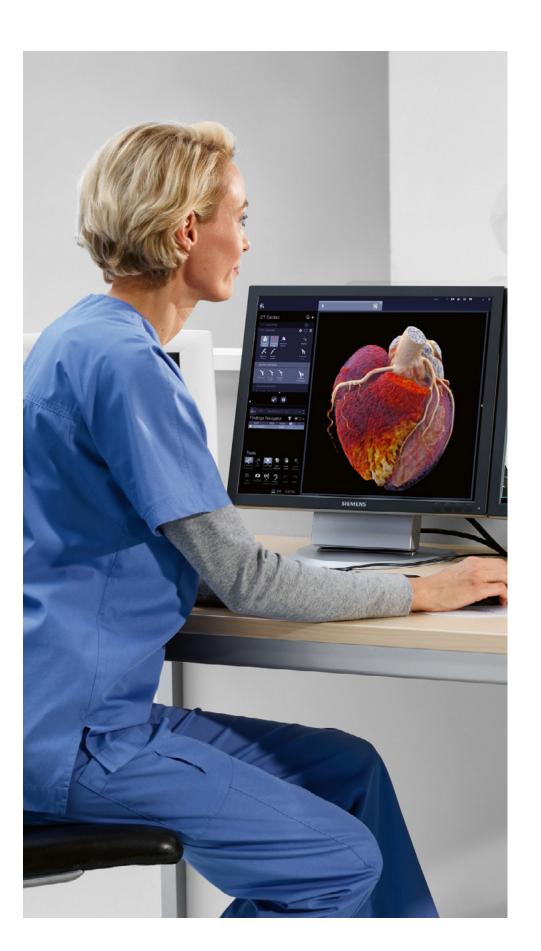
#### Course fee:

€0



# Cardiology – cross-modality trainings

Interdisciplinary training courses for cardiovascular care



ses for Cardiovascular Care	MTs / RTs*	Physicians	Physicists	ΙΤ	Basic skills	In-depth skills	Course type
Cardiology – cross-modality trainings							
> Cardiac CT with Somaris 10	•	•			•		ŢŢ
> CT Dose Optimization	•	•				•	Ţ
> Coronary CTA Interpretation		•				•	1
> Cardiac CT with syngo.via	•				•		1
> Introduction to Cardiology in Somaris X	•				•		
> CT Cardiac	•					•	
> Artis Basic Course	•				•		Ä
> Artis Workshop for Physicists						•	Ţ
> Interventional Cardiology	•	•				•	<b>+</b>
> syngo.via – Cardiovascular Workflows CT and MR	•	•				•	Ą
> Advanced PET/CT Imaging	•	•					Ą
> Cardiac Imaging in MRI	•	•			•	•	<b>P</b>



# Fellowship Program

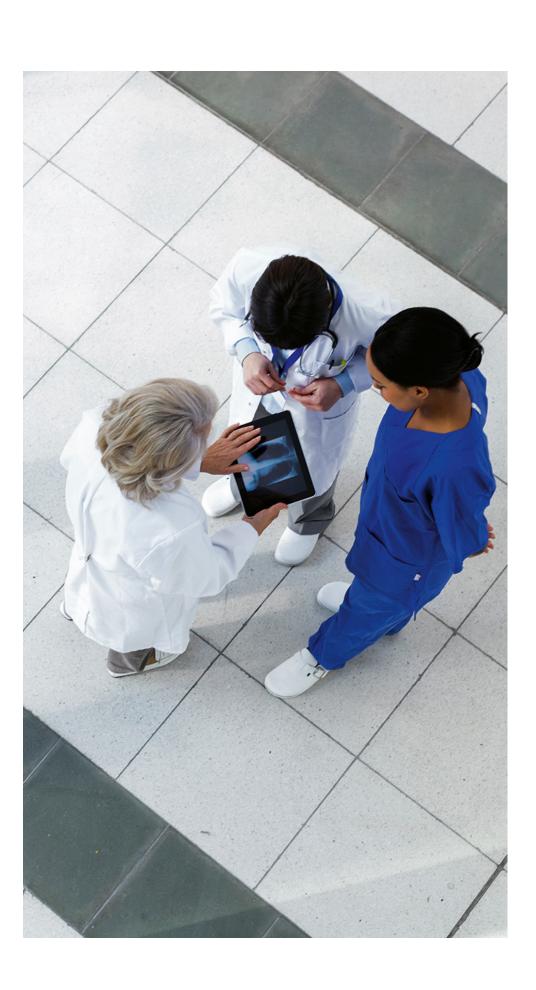
Observership courses in our host hospitals



ost mospitals	MTs / RTs*	Physicians	Physicists	ΙΤ	Basic skills	In-depth skills	Course type
Fellowship Program							
> Fellowship Computed Tomography	•	•			•		<b>(+,</b>
> Fellowship Cardiovascular Care	•	•					<b>(+,</b>
> Neuroradiology – ARTIS icono biplane	•	•					<b>(+,</b>
> Radiology and Interventional Therapy – Artis Q ceiling	•	•					<b>(+,</b>
> MR Observership	•	•	•		•	•	<del>(+,</del>



# General Information



## Information

- Our Training Forms
- Our Locations
- Credit Points
- > Training News
- Registration
- > Current Information
- > General Terms and Information

# **Our Training Forms**



## **Classroom Training**



Classroom training sessions generally take place at our Training Centers.
Theoretical principles of imaging are supplemented by a wide range of practical exercises on the most recent systems, giving learners the opportunity to gain skills for day-to-day clinical work.



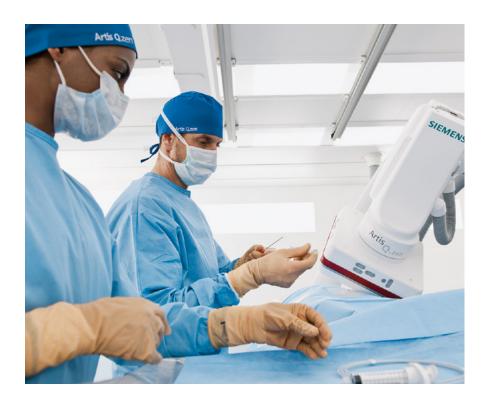
## **Clinical Workshop**



Clinical workshops are training programs which last one to several days and specifically focus on clinical issues. They include lectures given by clinical experts, live examinations, and, in many cases, practical exercises.



## **Fellowship Program**



The visiting fellowship program enables customers to observe our systems in clinical practice, to discuss their use with colleagues at the host hospital, exchange experiences and develop new contacts.



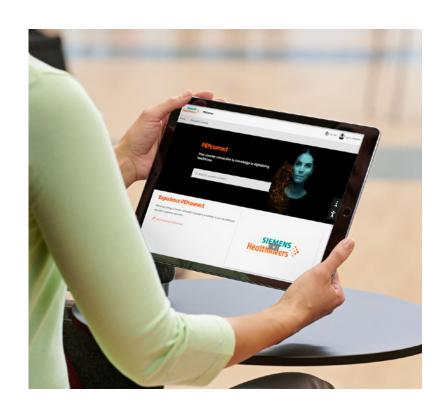
## **Virtual Classroom Training**



In our virtual classroom training, we impart practical knowledge in clear, manageable units. We focus on retaining the interactive approach that you are familiar with from our face-to-face training. Learn in the virtual work space and benefit from innovative digital methods.



## **E-Learning**



E-Learning content is available as web-based training. You receive interactive application training in which system operation is clearly presented.



## **Our Locations**

## Siemens Healthineers Global Training Center

The Siemens Healthineers Global Training Center in Erlangen is a training facility equipped with modern and high quality technologies. In about 900 courses per year over 7,300 participants from all over the world receive trainings here. Away from their daily routine in the clinic, the participants, together with colleagues from other clinical sites, will be extensively trained on how to operate medical systems and the corresponding application software. Fifty large and state-of-the-art systems form part of the equipment portfolio.



Siemens Healthineers
Global Training Center
Allee am Röthelheimpark 3
91052 Erlangen

## Imaging Science Institute

Many courses take place at the Imaging Science Institute (ISI) Erlangen, Germany. The ISI Erlangen is a cooperative project of the University Hospital Erlangen and Siemens Healthineers. The exceptionally close cooperation facilitates practical training in real clinical surroundings, as the ISI is located right at the University Hospital Erlangen. The course participants attend block courses in routinely operated radiological examination rooms with experienced doctors acting as trainers. Participants benefit from the comprehensive clinical and technical experience of the University Hospital Erlangen.



Imaging Science Institute
Universitätsklinikum Erlangen
Ulmenweg 18
91054 Erlangen

## Regional venues

In addition to our courses in Erlangen, we offer an increasing number of theoretical courses at various regional locations. Many of these courses take place outside regular working hours and offer impressive, practical content under expert guidance. In many cases, they are led by our application specialists with whom you are already familiar. Clinical workshops on the premises of our partner hospitals provide you with the opportunity to experience examinations performed by experts, to listen to lectures, and often even to participate in practical exercises.



Siemens Healthineers Branches Hotels Partner hospitals



## **Credit Points**

## Certification enhances quality

Certificate programs are designed to give students mastery over a specific subject area or topic. These programs are offered in many professional fields and academic areas, including healthcare. Some courses in the training program offered by the Siemens Healthineers Global Training Center include different types of credit points extended in Germany or Austria. Please find further information of the different accreditations below.

#### **CME Credits**

Several of our training courses have been submitted to the Bavarian Medical Association for approval of credits in category C.

#### **Credit Points**

The German DVTA and the DIW-MTA offer training programs for MTA. Part of our training courses have been submitted for voluntary certification in category C.

#### **DFP Credits**

As some of our classroom trainings and clinical workshops are taking place in Austria, those courses have been submitted to the Austrian Medical Association for approval of credits.

#### **CPD Points**

Continuing Professional Development (CPD) improves skills and knowledge. Therefore several of our training courses taking place in Austria have been submitted by Bundesfachverband für Radiologietechnologie.





# Training News

## Get the latest news

Please contact us for new course dates and news in the training and continuous learning world of Siemens Healthineers. If you are interested in a specific field we will forward your request to the specialist.

## **Updated information**

You will receive the latest news about changes or additional information in the current course program.

## **Professional expertise**

You choose your specific area of interest and we forward your request to the specialist.

## Clear advantage in knowledge and information

You will be among the first to learn about news and updates in the training and education program of your area of interest.

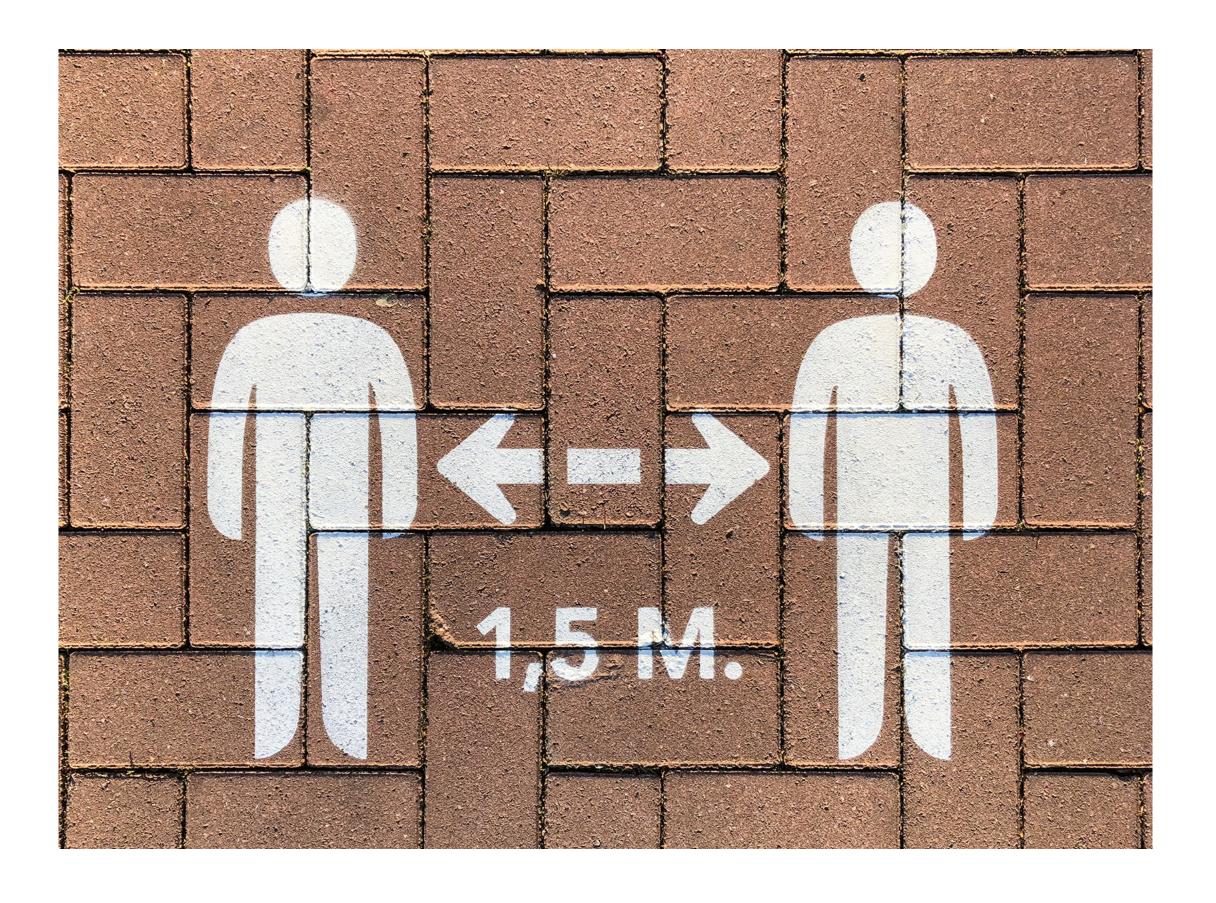


# Registration

I hereby register for the following course: Course Title Course organizer / language Course date First name/Last name Course ID Course fee Institution/Hospital I have read and accept the terms of use and registration conditions on the reverse. Street ZIP/City, country Signature Phone wlarea code Fax Date Send



# **Current Information**



## Information in light of the current health situation

As a medical technology company, our top priority is people and their safety.

If courses are unable to take place due to the current COVID-19 pandemic, we will, if possible, offer registered participants alternative dates for the same type of training.

We also reserve the right to run the courses in a partially or fully virtual form, in accordance with the current hygiene regulations.



# General Terms and Information

#### Registration

It is possible to register online for nearly all the courses we offer. In most cases all you need is the course ID. You can also use the registration form or contact us at the phone number listed at the end.

#### **General Terms and Conditions**

Course fees include all refreshments, catering and training material. All courses held at the Siemens Healthineers Global Training Center in Erlangen begin at 8:30 AM on the first day. Please check your registration confirmation or training material for further information about courses held at other locations. Your course registration is complete after availability has been checked. A reservation confirmation and further course information will be sent by e-mail well ahead of the course date. You will receive an invoice one to two weeks before the course takes place.

#### Cancellation

There is no charge for cancellations made at least two weeks prior to the beginning of the course. However, payment of the total course fee is due if you fail to cancel at least two weeks before the course starts. In case of low participant numbers, a decision will be taken to cancel the course two weeks before the training begins. For this reason, we ask all participants to register for courses at least two weeks in advance. If necessary, we reserve the right to change instructors or adjust how a course is run.

### **Payments**

Collection of any and all payments from the client to the Siemens Healthineers Global Training Center will be performed by the respective country organization.

Please note the General Terms and Conditions of Siemens
Healthcare GmbH pertaining to the training provided by
the Siemens Healthineers Global Training Center, which can
be found on the Internet at

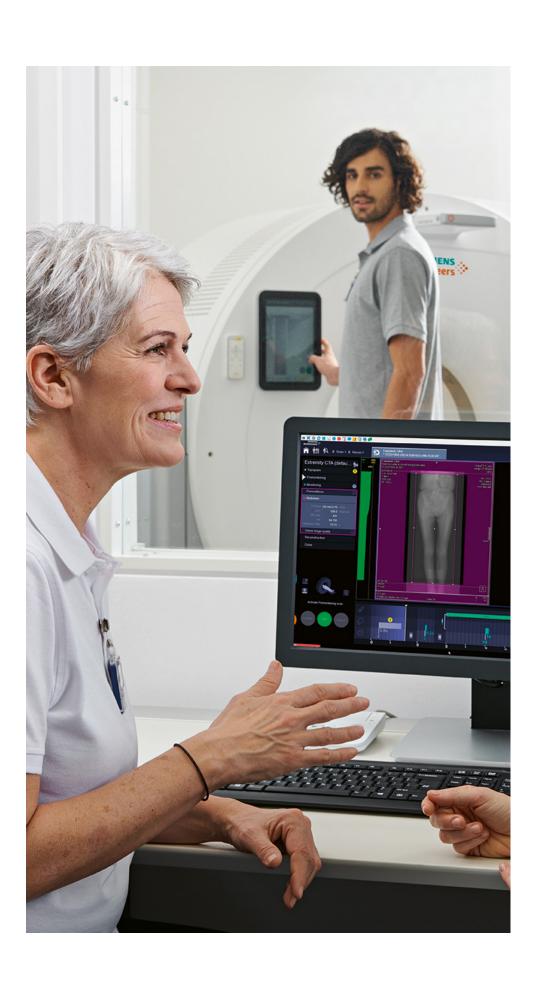
### https://training.healthcare.siemens.com/home.do

#### Contact

Siemens Healthcare GmbH
Customer Services
Global Training Center,
Course Administration
Fax: +49 9131 84-6492



# **Customer Services**



### **Customer Services**

- > UpSkill Services
- > Blended Learning in Practice New
- > Education Plans
- > PEPconnect & PEPconnections

The products/features and/or service offerings (here mentioned) are not commercially available in all countries and/or for all modalities. If the services are not marketed in countries due to regulatory or other reasons, the service offering cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

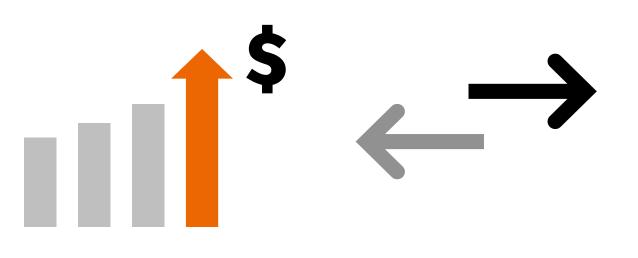


# **UpSkill Services**

# Beyond installing new equipment, we provide you with the knowledge you need to excel

In a healthcare environment, keeping professional competence at the highest level is of utmost importance because it has a direct impact on clinical performance, personal job satisfaction, and patient outcomes.

With our UpSkill Services from Siemens Healthineers, we share the latest technical and clinical knowledge enabling you to continuously and strategically build and develop your job-specific skill-sets to provide better patient care.





## **Five Optimize Programs**



**Optimize Dose** 



**Optimize Contrast Imaging** 



**Optimize Efficiency** 



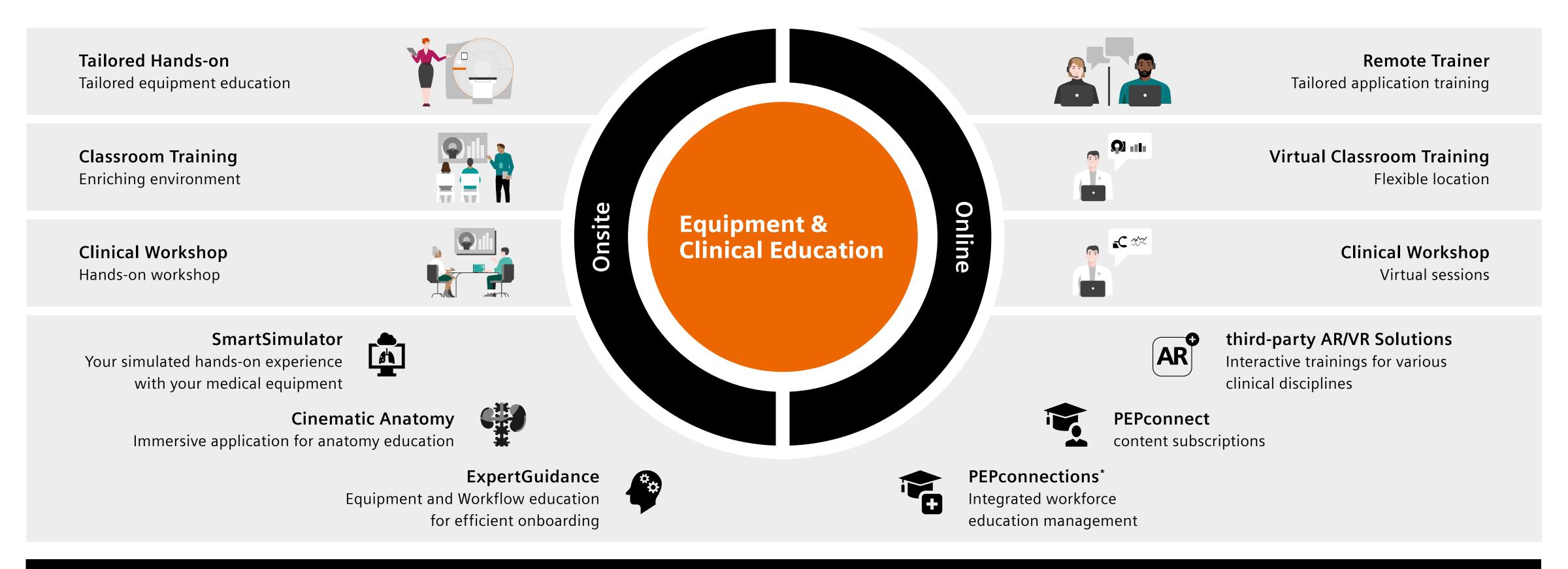
**Optimize Structured Reporting** 



**Optimize Virtual Workflow** 



## Education Services provides solutions customized to your needs



## Immersive & Digital for Individual Education

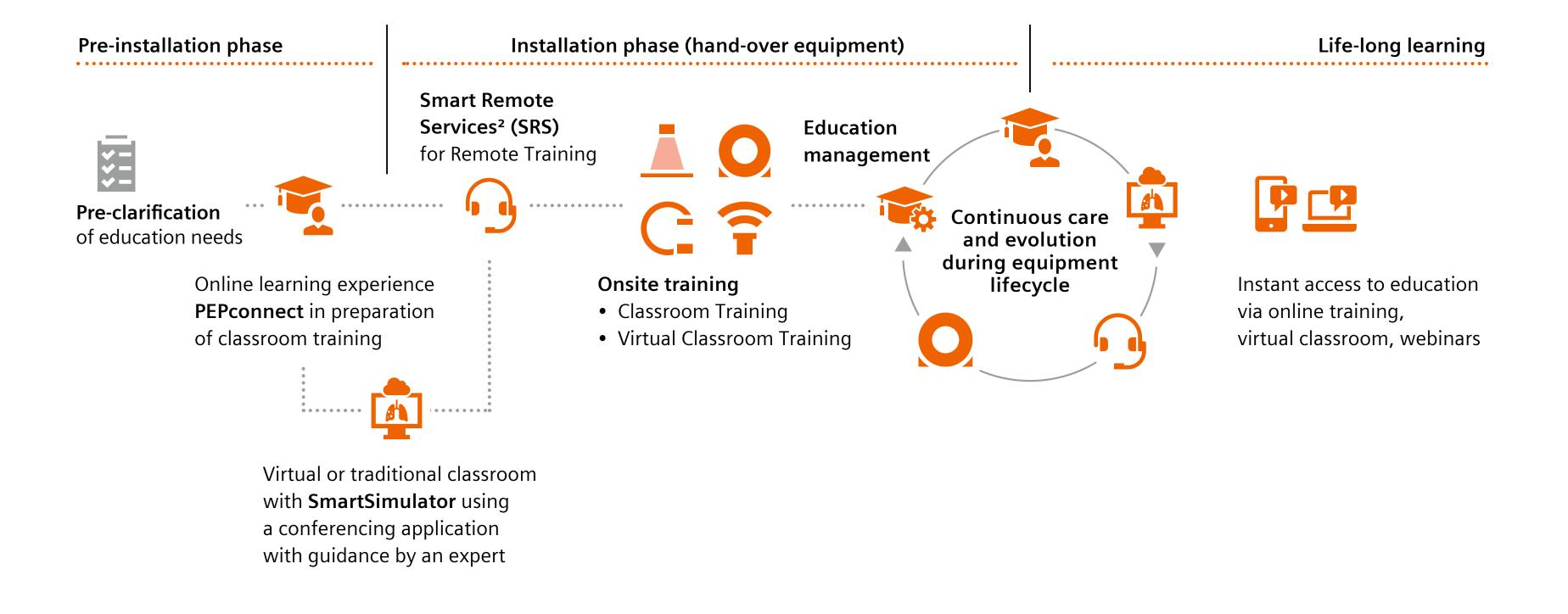
\*Subscription required. Availability of subscription depends on country.



# Blended Learning in Practice

## **Education and workforce solutions**

Blended Learning solutions from Siemens
Healthineers enable institutions to provide
a variety of education formats to improve
competences and experience for their
workforce anytime and anywhere. Blended
Learning is an evolutionary approach to
application and equipment training that
consists of five pillars, which are based on
a pre-clarification meeting.



<sup>1</sup> There is no percentage of blend for each of these pillars and the amount of blend can vary from customer to customer.



## **Education Plans**

## **Empowering your institution with expertise**

An Education Plan is a long-term agreement that combines different education events into one comprehensive package. It is flexible and can be adapted to the changing needs and knowledge levels of your workforce. With an Education Plan, you benefit from continuous education tailored to the needs of your institution which sustainably empowers both your staff and your organization.

The Education Plans come in three different formats – GAIN, GROW, LEAD – and can start with the installation of your new equipment from Siemens Healthineers as well as help you with continued education needs related to your ongoing operational cycles. As the Original Equipment Manufacturer, the education experts from Siemens Healthineers are best suited to train your staff in all matters related to continuous equipment and clinical application management.





## GAIN Confidence. GROW Capabilities. LEAD with Expertise.

	Education and Skills Assessment <sup>2</sup>		Options
PEPconnections	PEPconnections	PEPconnections	
Optimize Program	Optimize Program	Optimize Program	
Remote Assist	Remote Assist	Remote Assist	
		Clinical Workshop	
		Classroom Training	
	Tailored Hand-on	•	
PEPconnect	Tailored Hand-on PEPconnect	Classroom Training	
PEPconnect Hand-over Training		Classroom Training Tailored Hand-on	Education Plan

<sup>1</sup> In case of a multi-year contract

<sup>2</sup> Availability of the assessment depends on country. The products/features and/or service offerings (here mentioned) are not commercially available in all countries and/or for all modalities.

If the services are not marketed in countries due to regulatory or other reasons, the service offering cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.



## Discover PEPconnect & PEPconnections\*

## Your smarter connection to knowledge in digitalizing healthcare

PEPconnect is our personalized online education experience designed for healthcare professionals that's customized to their role and learning behavior – designed to increase their competency, efficiency, and productivity.

- Explore engaging learning activities including e-learnings, webinars, job aids, videos, virtual classrooms, and more
- Create your own virtual learning experience with an individual profile, education plan and transcript to record your training and subscribe to services and content with Virtual Wallet points
- Benefit from the online network of professionals and connect, communicate, and be part of social learning group

With the premium subscription PEPconnections, you can easily manage your clinical institution's performance growth. Its integrated workforce education management and administration features allow you to:

- Manage the education of entire teams or departments through the creation of tailored education plans as well as group assignment and tracking functionalities with a single solution
- Personalize the education experience of individual employees with customizable education plans, combining education designed by Siemens Healthineers, your institution and independent providers
- **Streamline audit preparation** with instant access to dashboards and comprehensive reports on the education status of your team or department



## A complete virtual education experience

## **PEPconnect**



# Education experience for the individual

Access at no charge:

- > 14,000 learning activities anytime, on any device
- Personalized learning experience with profile, plan and transcript

## **PEPconnections**\*



# Education experience for the institution

Premium subscription-based access to:

- Workforce education management and administration
- Reports, analytics and progress tracking
  - Premium content and service subscriptions

Support your staff in expanding precision medicine by consistently delivering high-quality results – with PEPconnect and PEPconnections.

- Instant access to education anytime, anywhere, on any device
- Information and updates on cutting edge trends
- > 14,000 learning activities in over 10 languages



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## **Siemens Healthineers Headquarters**

Siemens Healthcare GmbH

Henkestr. 127

91052 Erlangen, Germany

Phone: +49 9131 84-0

siemens-healthineers.com