

SIEMENS



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Visiting Fellowship Program

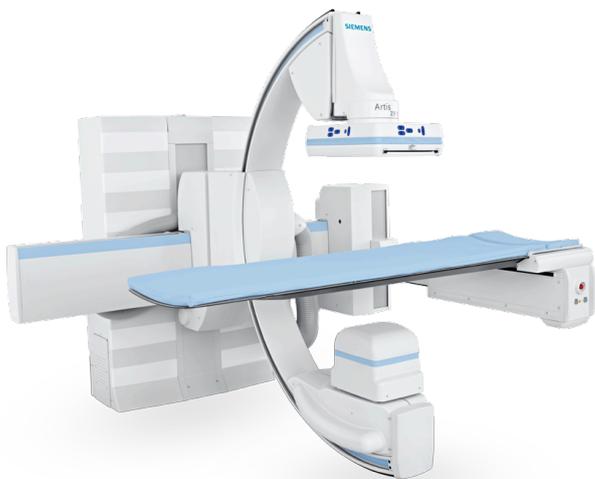
Exchanging clinical experiences. Gaining clinical insights.

Answers for life.



A valuable visit

The Visiting Fellowship Program of Siemens Healthcare offers interventionalists and technologists from around the world the unique opportunity to experience Siemens imaging solutions in clinical operation at one of its partner university hospitals. It is an excellent chance to gather firsthand knowledge by observing clinical workflows at another institution. Designed in cooperation with experienced physicians and radiological technologists, the 2 – 5 day courses offer the opportunity to discuss procedures with colleagues from the field at dedicated fellowship sites and develop new contacts. Participants also get the chance to exchange valuable insights – on the latest procedures as well as Siemens imaging solutions.



Artis zee multi-purpose



Artis zee floor



Artis zee



ceiling



Artis zee biplane



Artis zeego

Advancing interventional imaging with Artis family

Comprising a floor- and ceiling-mounted as well as a biplane and multi-purpose system, the Artis family of imaging systems covers the complete range of interventional applications. It also includes a highly flexible multi-axis system with robotic technology: **Artis zeego**.



Artis Q/Q.zen floor



Artis Q/Q.zen ceiling



“ I am so glad to have cooperated with Siemens in this way. The fellowship gave me the possibility to collect clinical and applications knowledge in Grobhadern and I am proud to forward this to the colleagues in my country. ”

Mohammed Reza Salmanni, Medical Physicist at Pars Hospital, Tehran, Iran

“ What I really like is the exchange of experience between doctors, technicians and Siemens engineers, since I am not just trained as a doctor, but also have an engineering background. ”

Tobias Waggerhauser, MD, Dept. of Radiology, University of Munich, Grobhadern, Germany



Artis Q/Q.zen biplane



Artis zeego with Q technology

Interventional Radiology

The University Hospital Munich is one of Europe's largest and most progressive public healthcare facilities with over 2,300 beds and numerous specialty institutes and departments. Dilatation and stenting procedures using catheter balloons and stents as well as the treatment of liver and lung tumors form the primary focus of its Institute for clinical radiology in the area of interventional radiology.

Participants are exposed to various interventional radiology techniques using an **Artis zeego system with syngo DynaCT**.



Course content

- Peripheral angiography
- Port implantation and explantation
- Chemoembolizations
- Selective internal radiation therapy (SIRT)
- Transjugular intrahepatic portosystemic shunt (TIPSS)

Target audience

Radiologists, radiographers, and technicians

“ I love the flexibility of the Artis zee ceiling. Whether the system needs to be positioned at the head end or on the right or left side, it makes my daily work comfortable and easy. ”

Prof. Thomas Albrecht, MD,
Head of Department of Radiology and Interventional Therapy,
Vivantes Hospital Neukölln

Course content

- Interventional radiology, abdominal & peripheral procedures
- Chemoembolizations
- Mechanical vascular recanalization intra-arterial lysis therapy
- Aspirational thrombectomy
- Interventional therapy for abdominal aortic aneurysms
- Radiofrequency ablation for liver and kidney tumors
- Transjugular intrahepatic portosystemic shunt (TIPPS)
- Chemoembolization of liver tumors
- Embolizations of hemorrhages and tumors

Target audience

Radiologists, radiographers, and technicians

Interventional Radiology

The Vivantes Hospital in Berlin Neukölln is a very modern facility with some 1,050 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.





City Hospital of Karlsruhe
Central Institute for Imaging Diagnostics
Moltkestrasse 90
76133 Karlsruhe
Germany

Interventional Radiology

The Central Institute for Imaging Diagnostics at the City Hospital of Karlsruhe covers the complete radiological spectrum from diagnostics to interventional radiology, including pediatrics and neuroradiology. In the area of interventional radiology, the institution specializes in vessel dilatation and interventional techniques using balloon catheters and stents as well as the treatment of liver and lung tumors.

Participants are provided with key insights in the use of the **Artis zee biplane system** to support interventional radiology procedures.



Course content

- Peripheral angiography
- Carotid artery stenting
- Port implantation and explantation
- Chemoembolization
- Selective internal radiation therapy (SIRT)
- Transjugular intrahepatic portosystemic shunt (TIPSS)

Target audience

Radiologists and radiographers

“When a system is installed for the first time worldwide*, you always expect some hiccups or downtime. But we did not experience any of this. That was really amazing!”

Prof. Frank Wacker, MD
Head of the Department of Diagnostic and Interventional Radiology,
Hannover Medical School, Germany

Course content

- Peripheral vascular interventions (arterial and venous)
- Recanalization of CTO in patients with PAD
- Renal artery stenosis
- Chemoembolization of liver tumors
- Therapeutic interventions in patients with liver transplantation
- Transjugular intrahepatic porto-systemic stent system (TIPS)
- Systematic diagnosis and treatment of patients with vascular malformations (AVM)
- Minimally invasive treatment of aortic aneurysms, aortic dissections and endoleaks
- Central venous access (ports, PICC lines)
- Pulmonary angiograms

Target audience

Interventional radiologists



Hannover Medical School

Interventional Radiology

The Hannover Medical School (MHH) was founded in 1965 to increase the number of students of medicine in Germany. Over 3200 students are enrolled at the MHH. Beyond teaching, the MHH has become one of the world's leading university medical centers with three research focuses; infection, immunity and inflammation research, transplantation and stem cell research, as well as biomedical engineering.

A characteristic feature of these research focuses is, in addition to the recognized expertise of the MHH in basic research, the high degree of interdisciplinary cooperation with the clinical departments.

Participants can broaden their knowledge and gain in-depth experience in general, vascular and body radiology procedures, including interventional oncologic treatment. All diagnostic angiograms and vascular interventions are performed with the visionary **Artis Q ceiling**, which is installed as a hybrid IR that complies with hygienic room classification class II surgery room standard for sterility.

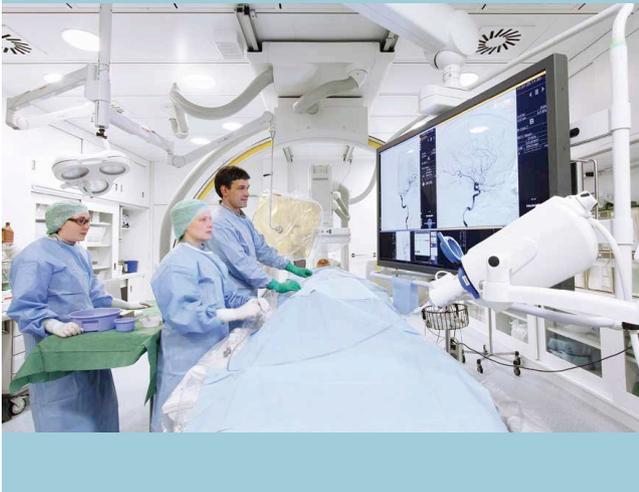


* 1st installation of the system dedicated for abdominal and peripheral vascular Interventional Radiology.

Interventional Radiology

The University Hospital of Regensburg is the only tertiary health care provider in Eastern Bavaria, a region with about 2 million inhabitants. With a case mix index of approx. 1.9, Regensburg is the leading German university hospital and thus the most efficient tertiary health care provider in Germany. The Department for Interventional Radiology of the University Hospital of Regensburg covers the whole radiological spectrum, from diagnostic to interventional radiology, including pediatric radiology and neuroradiology.

The participants will learn how the **Artis zee biplane** is used in interventional radiology, neuroradiology and interventional pediatric.



Course content

- Percutaneous angioplasty
- Transarterial chemoembolisation (TACE)
- Selective internal radiotherapy (SIRT)
- Treatment of malformations (especially in children)
- Embolizations (e.g. uterine myoma embolization)
- Biliary drainage, TIPS
- Neurological interventions

Target audience

Interventional radiologists, neuroradiologists, and radiographers



“With my Siemens system, I can easily cover the daily demands in a neuroradiology department with highly sophisticated cases. The reconstruction time for rotational angiography studies is very short.”

Alexander Bock, MD,
Head of Department of Clinical and Interventional
Neuroradiology, Vivantes Hospital Neukölln



Interventional Neuroradiology

The Vivantes Hospital in Berlin Neukölln is a modern 1,051-bed institution with 20 specialty departments, 398 doctors and 875 nurses. The Institute for Clinical and Interventional Neuroradiology covers the complete spectrum of diagnostic and interventional procedures. It also offers its services via a tele-neuroradiology network.

Participants are familiarized with various neuro-radiological techniques and procedures using the facility's Artis zee biplane system.



Course content

- Interventional neuroradiology procedures
- Embolizations with different materials to treat cerebral aneurysms, cerebro-spinal vascular malformations and arteriovenous tumors of the CNS, spine and head/neck regions
- Revascularization in acute stroke therapy
- Stenting of carotid and intracranial stenosis

Target audience

Radiologists, neuroradiologists, and radiographers



Interventional Neuroradiology

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 methods for diagnosing disorders of the central nervous system using an **Artis zee biplane** or **Artis zeego system with syngo DynaCT**. The course also covers various therapeutic neuroradiological procedures.



Course content

- 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 DynaCT
- Carotid artery stenting (rotational angiography and DynaCT)
- Usage of DynaPBV Neuro

Target audience

Radiologists, neuroradiologists, and radiographers



Interventional Cardiology

The Leopoldina-Hospital Schweinfurt, which uses an AXIOM Artis dBC with AXIOM Sensis XP & Artis zee floor, offers their patients state-of-the-art diagnostic and therapeutic cardiac treatment. It is an academic teaching hospital associated with the University of Wuerzburg. The city of Schweinfurt is located close to Erlangen/Forchheim and can be reached by car or train in less than 1 hour. Participants learn how the AXIOM Artis dBC with AXIOM Sensis XP is used in interventional cardiology.

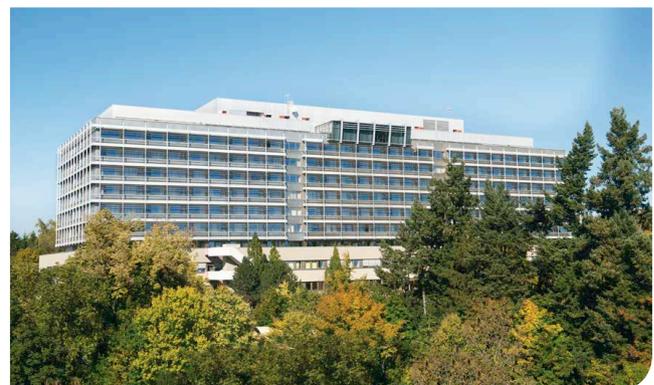
Since both a single-plane Artis zee floor and a biplane system are available, there is a unique opportunity to explore clinical use and learn the differences between a single-plane vs. a biplane system configuration.

Course content

- Diagnostic left and right heart catheterization
- PCI including stenting and rotablation
- Percutaneous septum ablation for the treatment of cardiomyopathies
- Percutaneous closure of septum defects
- Mitral valvuloplasty
- Peripheral angiography
- Angioplasty of peripheral vessels
- Carotid stenting
- Angioplasty of renal arteries

Target audience

Cardiologists, radiographers, and technicians



Interventional Cardiology

The world-renowned University Heart Center in Leipzig is one of the largest heart centers in Europe. They perform more than 12,000 procedures per year. In interventional cardiology they use two **Artis zee biplane systems** for diagnostic cath, PCI and CTO. By having an **Artis zeego** in a hybrid room, they can perform hybrid procedures – mainly minimally invasive valve replacement. Hybrid procedures are done using a multidisciplinary approach, with the heart team working closely together.

Participants are introduced to interventional cardiology using **Artis zee biplane systems** and an **Artis zeego** for advanced applications like **syngo Aortic ValveGuide**.



Course content

- Diagnostic left and right heart catheterization
- PCI including stenting and rotablation
- Treatment of chronic total occlusion (CTO)
- Aortic and mitral valvuloplasty
- Minimally invasive transcatheter aortic valve implantation (TAVI)
- Treatment of all different kind of arrhythmias
- Percutaneous closure of septum defects
- Implantation of pacemaker and cardioverter defibrillator

Target audience

Cardiologists, cardiac surgeons, radiographers, and cardiology nurses



Interventional Cardiology

The Hospital Darmstadt is an academic hospital with 21 different institutes and more than 950 beds. Prof. Dr. Gerald Werner is head of the Cardiology Department. He and his enthusiastic team cover the full spectrum of care, including the diagnosis and treatment of cardiac illnesses using all currently standard non-invasive and invasive methods as well as innovative new treatments. The clinic is one of the dedicated centers in Germany for chronic total occlusion (CTO).

Participants are introduced to advanced procedures using an Artis zee floor and Artis zee biplane system.

Course content

- Diagnostic left and right heart catheterization
- PCI including stenting and rotablation
- Treatment of chronic total occlusion (CTO)
- Aortic and mitral valvuloplasty
- Treatment of arrhythmias
- Percutaneous closure of septum defects
- Implantation of pacemaker and cardioverter defibrillator

Target audience

Cardiologists, radiographers, and cardiology nurses





Pediatric Cardiology

The University Hospital Erlangen is one of the main centers for children's health in Germany. They offer the full range of pediatric cardiology diagnostic and therapy of congenital heart diseases as well as pre- and post-treatment for the complete spectrum of congenital heart surgery.

The pediatric cardiology team of Prof. Sven Dittrich performs more than 300 procedures per year in the lab. They have a lot of experience with 3D imaging.

Participants are introduced to the broad spectrum of pediatric cardiology and advanced applications using an Artis zee biplane system.



Course content

- Diagnostic left and right heart catheterization
- Interventions in univentricular heart
- Treatment of coarctation
- Closure of atrial and ventricular septal defects
- Transcatheter pulmonary valve implantation
- Coil closure of ductus arteriosus

Target audience

Pediatric cardiologists, pediatric cardiac surgeons, radiographers, and pediatric nurses





UniversitätsKlinikum Heidelberg

University Hospital Heidelberg
Department of Vascular und Endovascular Surgery

Im Neuenheimer Feld 110
69120 Heidelberg
Germany

Surgery

The Department of Vascular and Endovascular Surgery at Heidelberg University Hospital has a long history, starting in 1958. It is an academic center with a broad spectrum, high volume and clinical & basic research facilities. The department offers the whole range of operative, minimally invasive and interventional therapy for vascular diseases with special emphasis on aortic diseases, carotid surgery and modern treatment of peripheral artery occlusive disease (PAOD). Heidelberg is one of the leading vascular surgery centers in Germany.

Participants will learn the most recent endovascular techniques in a hybrid operating room with an Artis zeego.



Prof. Dittmar Böckler, MD
Department of Vascular Surgery,
University Hospital Heidelberg, Germany



Course content

- Endovascular therapy of aortic aneurysms and dissections (EVAR, TEVAR, FEVAR and BEVAR, chimney and parallels grafts)
- 3D image guidance of endovascular procedures, especially EVAR-guided surgical, endovascular and hybrid therapy of PAOD
- Carotid endarterectomy and carotid stenting
- Therapy of peripheral arterial disease

Target audience

Vascular and endovascular surgeons



Surgery

The Center for Cardiovascular Diseases was set up in 1974 for the diagnosis, therapy and rehabilitation of cardiovascular diseases.

In 1989 the Center for Cardiac and Vascular Surgery was added and a hybrid OR was set up in 2010. It is equipped with the **Artis zeego system with the Artis OR table, syngo DynaCT, syngo Aortic ValveGuide, Sensis**, two Large Displays and a Cockpit.

In the hybrid OR, close to 100 TAVIs are performed per year by both cardiac surgeons and cardiologists. In addition, mitral valve replacement and vascular surgery is also being done in the room.

Participants are introduced to cardiac and vascular surgery using an **Artis zeego**.



Course content

Observe several procedures in the hybrid room where the angiography systems are used for imaging:

- Transcatheter valve implantation (transapical or transfemoral)
- Discussion of diagnosis and results
- TEVAR / EVAR*
- CRT

* on request

Target audience

Cardiac and vascular surgeons, radiologists, and cardiologists



A rewarding radiological experience

Participation in one of our Visiting Fellowship Programs is an all-around rewarding experience, one offering the unique opportunity to gain firsthand exposure to a range of highly advanced diagnostic and therapeutic radiological procedures as well as to top-of-the-line Siemens imaging technologies in clinical operation. It is also an excellent chance to confer with experts from other countries on the latest developments and techniques within their respective field.

Contact your local Siemens representative and register early!

Because participation in our programs is limited to three persons maximum, we encourage you to register as early as possible.

For more information on our Visiting Fellowship Programs and on how you can register, contact your local Siemens representative or visit our website at:

www.siemens.com/Interventional-Fellowships

The products/features mentioned herein are not commercially available in all countries. Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local Siemens organization for further details.

The statements by Siemens' customers presented here are based on results that were achieved in the customer's unique setting. Since there is no "typical" hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption), there can be no guarantee that other customers will achieve the same results.

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