



Klinikum rechts der Isar

Technische Universität München



# 29th Hands-on Intensive Training for Engineers: Surgery in Practice

06th - 07th November 2025



**VDE** DGBMT

DEUTSCHE GESELLSCHAFT FÜR CHIRURGIE

SEKTION FÜR MINIMAL INVASIVE, COMPUTER- UND TELEMATIK-ASSISTIERT E CHIRURGIE



Ladies and Gentlemen,

further progress in surgery will only be possible in the future if new tools and procedures are made available by medical technology. In order to accelerate the development of new diagnostic and therapeutic concepts, and to focus efficiently on the user needs, a more intensive exchange between surgeons, researchers and developers is required, more urgently than ever before.

In practice, this exchange is often more difficult than expected, as engineers and physicians come from different professional worlds. The diverse knowledge domains are characterized by their own language and methodological approaches and therefore require a common interface. Thus, interaction in the context of joint development projects holds great potential, a process we have termed Surgineering. This process requires profound fundamental knowledge of each other's domains.

In order to mediate a better understanding of surgical activities, the Research Group for Minimally Invasive Interdisciplinary Therapeutic Intervention (MITI) at TUM University Hospital, together with the German Society for Biomedical Engineering (DGBMT) in the VDE, have decided to offer a hands-on training course for engineers. The course is under the auspices of the Surgical Working Group for Computer- and Robot-Associated Surgery (CTAC) and is led by the topic "Surgery in Practice".

The course is supposed to illustrate the essential practical principles of interventional medicine and, above all, show areas of development that represent current challenges for medical technology. As courses of this kind have found a great echo in the past years, we are pleased to invite you once again to Munich, in November 2025.

Prof. Dr. med. D. Wilhelm

Dr. T. Becks

# Lecturers and tutors

**Prof. Dr. med. Dirk Wilhelm**

Clinical director at MITI, surgineering (TUM University Hospital, MITI)

**Prof. Dr. med. Hubertus Feußner**

Founder of MITI, surgical data science, experimental surgery  
(TUM University Hospital, MITI)

**PD Dr. med. Jeannine Bachmann**

Endoscopy (TUM University Hospital)

**Dr. med. Alissa Jell**

Gastrointestinal function diagnostics (TUM University Hospital, MITI)

**Dr. med. Maximilian Berlet**

Model based medicine (TUM University Hospital, MITI)

**PD Dr. med. Michael Kranzfelder**

Data communication (Klinik Hallerwiese-Cnopfsche Kinderklinik)

**Jonas Fuchtmann, M.Sc.**

Intraoperative data analysis (TUM University Hospital, MITI)

**Lukas Bernhard, M.Sc.**

Organizational director at MITI, clinical robotics, assistance systems (MITI)

**Dr. Ing. Jana Steger**

Trauma minimization, manipulator systems, additive manufacturing (MITI)

**Lars Wagner, M.Sc.**

Multimodal machine learning in surgery (MITI)

**Sven Kolb, M.Sc.**

Telediagnosics, medical robotics (MITI)

**Alexander Geiger, M.Sc.**

AI in medicine, multimodal data science (MITI)

**Luca Wegener, M.Sc.**

Mechatronic assistance systems (MITI)

**Sonja Stabenow, M.Sc.**

Human-Robot interaction (MITI)

**Emily Spicker, M.Sc.**

Assistance technologies in hospitals (MITI)

**Sidra Rashid M.Sc.**

Assistance technologies in hospitals (MITI)

**Dennis Schneider M.Sc.**

Computer vision in surgery (MITI)

**Nina Müller M.Sc.**

Human-Maschine communication (MITI)

# Organization and contact

**Tereza Baude**

Team assistance (MITI)

**Franziska Jurosch, M.Sc**

6G in medicine, medical robotics (MITI)

Short-term changes are possible. For more details, please visit:

[www.mitigroup.de](http://www.mitigroup.de)

# Thursday, 06th November 2025

09:30-10:00	Registration
Conference room 1	
10:00-10:30	Welcome
Conference room 1	(D. Wilhelm, Team MITI)
10:30-10:55	Surgery: An introduction
Conference room 1	(D. Wilhelm)
10:55-11:20	Open (conventional) surgery
Conference room 1	(M. Berlet)
11:20-11:45	Minimally invasive surgery
Conference room 1	(H. Feußner)
11:45-12:10	Robotic surgery
Conference room 1	(D. Wilhelm)
12:10-13:00	Lunch
13:00-15:15	Practical exercises and OR tour
Conference room 1/OR	
15:15-15:45	Coffee break
15:45-18:00	Practical exercises and OR tour
Conference room 1/OR	
from 19:30	Joint dinner

## Friday, 07th November 2025

08:30- 09:00

Conference room 1

OP hospitation allocation

09:00-11:30

ZPF/OR

Individual practical exercises and  
Live-surgery

11:30-12:00

Lunch

12:00-14:30

ZPF/OR

Individual practical exercises and  
Live-surgery

14:30-14:45

Pause

14:45-15:15

Conference room 1

Flexible endoscopy

(J. Bachmann)

15:15-15:30

Conference room 1

What does the surgeon expect from  
engineers, computer scientists and  
medical technicians?

(D. Wilhelm)

15:30-15:45

Conference room 1

What does the engineer expect from  
surgeons?

(L. Bernhard)

15:45-16:00

Conference room 1

Final discussion and farewell

(D. Wilhelm)

# General Information

## Organizers

### Research group MITI

Minimally invasive interdisciplinary therapeutical intervention  
Department of Surgery at TUM University Hospital  
Trogerstr. 10  
81675 Munich  
chirurgiekurs@mitigroup.de  
www.miti.med.tum.de

## Supported by

### DGBMT in VDE e.V.

Merianstraße 28  
63069 Offenbach am Main  
dgbmt@vde.com  
www.vde.com/dgbmt

## Venue

TUM University Hospital  
University Hospital rechts der Isar  
Ismaninger Straße 22  
81675 Munich

## Bank details

TUM Universitätsklinikum  
Bayerische Landesbank  
BIC: BYLA DEMM  
IBAN: DE82 7005 0000 0000 0202 72  
Reason for payment (please specify):

## Workshop 8810002002

## Program changes

Short-term program changes may be necessary due to business, private and organizational matters and will be announced in the current program. No recourse claims can be derived from this.

## Website

www.mitigroup.de

## Photography

Photos and film recordings are planned as part of the event, which will presumably be viewable afterwards via the homepage. As a participant of the event you agree to this, unless it is expressly contradicted in advance.

**Registration\*** (06th and 07th November 2025)

Company .....  
Surname/first name .....  
Street .....  
ZIP/Location .....  
Phone .....  
Mail .....  
Invoice address .....  
.....  
.....

- ☐ Surgical basics and practical exercises with  
hands-on intensive course  
Max. number of participants 16 persons  
Course fee **1250 Euro**

Signature .....

**Please detach registration and return it by  
12th September 2025 to:**

TUM Universitätsklinikum  
Klinikum rechts der Isar  
Forschungsgruppe MITI  
Trogerstraße 10  
81675 München

by mail to:  
**chirurgiekurs@mitigroup.de**

**Next course date**

The next course is expected to take place in March 2026.

\* This registration is binding. A cost-neutral transfer of the place within the company is permitted, provided that the organisers are consulted.  
Cancellation fees: up to 4 weeks before the course: 50%, thereafter 100%

**Sponsors:**



**Website:**

**[www.mitigroup.de](http://www.mitigroup.de)**