

Only the german version of the module description as part of the study regulations is legally binding.

Module name	Computer and robot-assisted surgery lab
Module number	INF-25-Ba-P-RC
Responsible lecturer	Prof. Dr. Stefanie Speidel stefanie.speidel@nct-dresden.de
Qualification objectives	Students are able to describe fundamental problems in robot-assisted surgery . They can develop the basic theoretical concepts and apply the acquired knowledge in practice in a team. They have skills in communication, organization and management gement.
Content	The module covers current interdisciplinary research topics in robot-assisted surgery, for example in the fields of medical image analysis, segmentation, navigation and visualization with augmented reality in the context of computer-assisted assistance systems in robot-assisted surgery.
Teaching and learning methods	The module comprises practical courses of 4 SWS and self-study. The language of instruction for the practicals may be German or English and will be specified by the lecturer at the beginning of each semester and announced in the usual manner .
Prerequisites for participation	The Bachelor's degree program in Computer Science and the Bachelor's degree program in Applied Computer Science require the skills acquired in the modules INF-25-Ba- Ma1 Linear Algebra and Analysis and INF-25-Ba-KI Artificial Intelligence.
Applicability	In the Bachelor's degree program in Computer Science, the module is a compulsory elective module of the Bachelorpraktikum, which must be selected in accordance with the annex to the examination regulations. In the Bachelor's degree course in Applied Information Science in the specialization in Medical Informatics, the module is a compulsory elective module to be selected in accordance with the annex to the examination regulations n. The module creates the prerequisites for the modules listed under prerequisites for participation.
Requirements for earning credit points	The credit points are earned if the module examination g is passed. The module examination consists of a complex performance of 80 hours. The examination language is German.
Credit points and grades	6 credit points can be earned through the module en. The module grade corresponds to the grade of the examination.
Module frequency	The module is offered every semester.
Workload	The total workload is 180 hours den.
Module duration	The module comprises one semester er.