

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

Module name	Medical Informatics - Visualization of medical data with SMART on FHIR
Module number	INF-25-Ba-W-PMZ-MedIV
Responsible lecturer	Prof. Dr. Martin Sedlmayr martin.sedlmayr@tu-dresden.de
Qualification objectives	Students are able to describe the fundamental problems of medical data processing and know the basics of medical documentation systems and data transfer mation. They can transfer medical data to the FHIR communication standard and can use FHIR data to develop medical applications using the SMART on FHIR platform . Students are able to design a medical application taking into account the needs of medical personnel and can thus transfer medical data into a presentation suitable for medical personnel. They are also able to plan application-oriented projects independently, define milestones on their own responsibility and adhere to these in a team.
Content	The module covers basic medical and technical aspects. These include an introduction to the special features and coding of medical data and their sources, the FHIR communication nsstandard and the SMART on FHIR framework, regulatory principles for the development and use of medical devices, data transformation processes, project planning and user-cent ered design, which includes an introduction to a clinical or medical-scientific problem including data preparation, visualization and transfer to the FHIR medical communication standard ndard. Further content includes the development and implementation of a user interface in SMART on FHIR to enable user-friendly and clear interaction with the data.
Teaching and learning methods	The module comprises practical courses of 4 SWS and self-study. The language of instruction for the practicals is German.
Prerequisites for participation	The competencies to be acquired in the module INF-25-Ba-PMZ-EMI Introduction to Medical Informatics are assumed.
Applicability	6 credit points can be earned through the module. The module grade corresponds to the grade of the examination.
Requirements for earning credit points	The credit points are earned if the module examination is passed. The module examination consists of a complex course of 80 hours. The examination language is German.
Credit points and grades	6 credit points can be earned through the module. 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.

Module duration	The module comprises one semester.
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