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

Module name	**Computational Laser Metrology Specialization - Application**
Module number	INF-25-Ma-NSP-CLM-ANW
Responsible lecturer	Prof. Dr. Jürgen Czarske juergen.czarske@tu-dresden.de
Qualification objec-Tives	Students have in-depth knowledge of the methodology of the application area of computational laser metrology and are able to theoretically describe and apply complex computer-aided laser measurement systems for specific applications in fluid technology, form measurement technology, quantum communication or biophotonics.
Content	Contents of the module are the physical and system-theoretical concepts of laser measurement technology as well as the experimental investigation and application of laser sensors, methods and current technologies ien for laser measurement systems for fluid technology, digital holography and image processing as well as biomedical laser systems and optogenetics.
Teaching and learning methods	The module comprises lectures of 4 SWS and self-study. The teaching language of the lectures is English .
Prerequisites for par-ticipation	The competences to be acquired in the module INF-25-Ma-NVE-CLM Computational Laser Metrology Vertiefung are a prerequisite for the diploma program in Computer Science.
Applicability	The module is a compulsory module of the non-computer science supplement Computational Laser Metrology in the Diploma program in Computer Science. 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 is passed. The module examination consists of a non-public oral examination as an individual examination lasting 25 minutes. The examination language may be German or English and will be specified by the lecturer at the beginning of each semester and announced in the usual manner.
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 winter semester.
Workload	The total workload is 180 hours.
Module duration	The module comprises one semester.