

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

Module name	Industrial Cyber Physical Systems Lab
Module number	INF-25-Ma-FCP-ICPS.Lab
Responsible lecturer	Prof. Dr. Martin Wollschlaeger martin.wollschlaeger@tu-dresden.de
Qualification objectives	Students are familiar with the requirements and application aspects of cyber physical systems in industrial applications and are able to work on simple research-related questions from this area in a structured and scientific manner under supervision.
Content	The content of the module is the practical development of results of simple, coherent, research-related projects from the context of the use of Cyber Physical Systems in industrial applications and their processing.
Teaching and learning methods	The module comprises practicals of 4 SWS and d self-study. The language of instruction for the practicals can be German or English and will be specified by the lecturer at the start of each semester and announced in the usual manner .
Prerequisites for participation	In the Diploma degree program in Computer Science, the competencies to be acquired in the modules INF-25-Ba-Prg Programming and RoboLab, INF-25-Ba-RN Computer Networks, INF-25-Ba-SWT Software Technology, INF-25-Ba-DMF Data Management Foundations, INF-25-Ba-SWTP Software Technology Project and INF-25-Ba-KI Artificial Intelligence are required. Knowledge of object-oriented programming at Bachelor's level is a prerequisite for the Master's degree course in Computer Science.
Applicability	In the Diploma degree program in Computer Science, the module is a compulsory elective module in the subject area of Cyber Physical Systems, which must be selected in accordance with Annex 2 to the examination regulations. In the Master's degree course in Computer Science, the module is a compulsory elective module in the open track in the subject area of Cyber Physical Systems and the supplementary g, which must be selected in accordance with Annex 2 to the examination regulations. The module can only be chosen once in the Master's degree program in Computer Science The module cannot be selected in the Master's degree program in Computer Science if this module or a substantially similar module from a degree program in which the admission requirements according to § 3 of the study regulations have been fulfilled has already been completed . The module fulfills 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 complex performance of 80 hours. 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	6 credit points can be earned through the module rden. The module

grades	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.