

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

Module name	Vehicular Networking
Module number	INF-25-Ma-FCP-C2X
Responsible lecturer	Prof. Dr. Christoph Sommer christoph.sommer@tu-dresden.de
Qualification objectives	Students are familiar with concepts and specific designs of vehicle networks. They are able to design vehicle networks and evaluate their performance and characteristics.
Content	The module covers concepts, specific designs and methods for evaluating networks in and out of vehicles.
Teaching and learning methods	The module comprises lectures of 2 SWS, exercises of 2 SWS and self-study. The language of instruction for the lectures and exercises may be German or English and will be determined by the lecturer at the beginning of each semester and announced in the usual manner.
Prerequisites for participation	The diploma degree course in Computer Science requires the skills acquired in the modules INF-25-Ba-Prg Programming and RoboLab, INF-25-Ba-RN Computer Network e, 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. The Master's degree course in Computer Science requires skills in object-oriented programming at Bachelor's level.
Applicability	The module is a compulsory elective module in the Diploma degree program in Computer Science in the main study program in the subject area Cyber Physical Systems, which must be selected in accordance with Annex 2 to the examination regulations. In the Master's degree program in Computer Science, the module is a compulsory elective module in the Open Track in the subject area Cyber Physical Systems and the Supplement, which must be selected in accordance with Annex 2 to the Examination Regulations, and in the Distributed Systems Engineering Track, which must be selected in accordance with Annex 3 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 module with essentially the same content from a study program in which the admission requirements according to Section 3 of the study regulations have already been fulfilled has already been completed. 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 20 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 way.

Credit points and grades	6 credit points can be acquired through the module. The module grade corresponds to the grade of the examination.
Module frequency	The module is offered every summer semester.
Workload	The total workload is 180 hours.
Module duration	The module comprises one semester.