

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

Module name	Automotive Software Safety
Module number	INF-25-Ma-FSP autoSAFE
Senior Lecturer	Prof. Mirko Conrad Mirko.conrad@tu-dresden.de
Qualification objectives	Students know and understand basic concepts and principles to ensure the safety of software-based systems in the automotive sector. They know and understand key principles, methods and procedures of functional safety according to ISO 26262 and target functional safety (SOTIF) according to ISO 21448.
Contents	The module shall include basic concepts and concepts for the development of safer E/E systems used in road vehicles, as well as basic principles, methods and procedures for functional and target functional safety (SOTIF) and related standards ISO 26262 and ISO 21448.
Forms of teaching and learning	The module includes lectures of 2 SWS and self-study. The language of instruction shall be English.
Eligibility for participation	The computer science diploma, the computer science master's degree, the computer science bachelor's degree and the applied computer science bachelor's degree require the skills to be acquired in the modules INF-25-Ba-SWT Software Technology and INF-25-FSP-AutoSOFT Automotive Software Engineering.
Usability	The module is a compulsory module in the field of Software Technology and Programming Languages in the computer science diploma course in the main course of study, to be chosen in accordance with Annex 2 to the Rules of Procedure. In the computer science bachelor's degree course, the module is a compulsory electoral module for specialist in-depth examinations, to be chosen in accordance with the annex to the examination rules. In the Bachelor's Degree in Applied Informatics, the module is a compulsory voting module in the deepening direction of media informatics, to be chosen in accordance with the annex to the test rules. The module is a compulsory open-track optional module in the field of Software Technology and Programming Languages in the Master's Degree in Computer Science, as well as the supplement to be selected in accordance with Annex 2 to the exam rules. The module can only be selected once in the Master's in Computer Science. The module cannot be chosen in the Computer Science Masters Course if that module, or a module with substantially the same content, from a course of study which met the entry requirements under Paragraph 3 of the Studienordnung has already been completed. The module provides the pre-requisites for the modules it designates under the pre-requisites for participation.

Conditions for the award of credits	Credits are awarded when the module test is passed. The module test consists of a non-public oral test performance as an individual test lasting 15 minutes. The language of the exam will be German or English, at the student's choice.
Credits and marks	The module allows for 3 credit points. The module score corresponds to the test performance score.
Frequency of the module	The module is available during the winter semester.
Workload	The total workload is 90 hours.
Duration of the module	The module covers 1 semester.