

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

Module name	Psychology specialization
Module number	INF-25-Ma-NVE-PSY
Responsible lecturer	Prof. Dr. Sebastian Pannasch sebastian.pannasch@tu-dresden.de
Qualification objectives	Students know the basic concepts and techniques of experimental design and can outline the quality criteria for research work. They have the ability to independently select methods and can independently plan investigations to answer typical research questions and present their results in an argumentative manner. They will be able to describe the most important research and application areas of engineering psychology and present basic theories, research methods and practical intervention and solution strategies. Students are able to analyze, compare and evaluate the objects of research with the help of suitable scientific methods and have the ability to reflect methodically on them.
Content	Contents of the module are experimental design and sample planning as well as basic theories and methods of engineering psychology, such as the scientific theoretical foundation of the experiment, methods of hypothesis formation, principles of experimental design, types of experiments and associated experimental designs, selection and compilation of samples, interpretation and communication of test results, ethical obligations and implications, perception and attention in the application, situational awareness as well as central issues of human-technical interaction such as automation, human error, display design and social aspects.
Teaching and learning methods	The module comprises lectures of 4 SWS and self-study. The language of instruction for the lectures is German.
Prerequisites for participation	The competencies to be acquired in the module INF-25-Ma-NGR-PSY Psychology Basics are a prerequisite for the Diplom degree program in Computer Science and the Master's degree program in Computer Science.
Applicability	The module is a compulsory module of the Non-Computer Science Supplement Psychology in the Diploma program in Computer Science. The module is a compulsory elective module of the open track supplement in the Master's degree program in Computer Science, which must be selected in accordance with Annex 2 to the examination regulations. The module can only be selected in the Master's degree program in Computer Science in combination with the module INF-25-Ma-NGR-PSY Psychology Basics. 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 degree program in which the admission requirements according to § 3 of the study regulations have already been met 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 portfolio of 40 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 summer semester.
Workload	The total workload is 180 hours.
Module duration	The module comprises one semester.