

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-NSP-PSY
Responsible lecturer	Prof. Dr. Sebastian Pannasch sebastian.pannasch@tu-dresden.de
Qualification objectives	Students can outline the functional principles of cognitive performance and understand which processes and mechanisms of information processing underlie this performance. They are able to present and reflect on general psychological theories, methods and research results. They also understand basic psychological findings about work systems and organizations and are able to describe principles of work and organizational analysis and design in socio-technical systems and can apply general methods of work and organizational psychology. Furthermore, they are able to apply the experimental methodology and principles of cognitive ergonomics as well as selected measurement methods in the development of human-machine interfaces and for the improvement of human performance, they can understand and assess complex issues in an interdisciplinary context, are capable of method-critical thinking and have argumentation techniques at their disposal.
Content	Contents of the module are an overview of methods, paradigms, theories and empirical results of cognitive psychology as well as basic theories and methods of work and organizational psychology such as concepts of work, organization and organizational theories, work analysis, work design, work motivation, organizational development and leadership. Furthermore, the module includes theoretical foundations of human-machine interaction and applied cognitive research such as attention landscapes, situational awareness, convergence of methods and disciplines, eye movement measurement, hazard perception and cognitive architecture. Further contents of the module are in-depth application areas of applied cognitive research.
Teaching and learning methods	The module comprises lectures of 6 SWS, seminars of 2 SWS and the self-study. The language of instruction for lectures and seminars is German.
Prerequisites for participation	In the Diploma degree program in Computer Science, the competencies to be acquired in the module INF-25-Ma-NVE-PSY Psychology specialization are a prerequisite.
Applicability	The module is a compulsory module of the Non-Computer Science Supplement Psychology 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 complex course of 80 hours. The examination language is German.

Credit points and grades	12 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 winter semester.
Workload	The total workload is 360 hours.
Module duration	The module comprises one semester.