

Module description

Module title	PSYCH-MA-PFM-02: Cognition and the Brain
Subject	General Psychology
Associated degree	Master of Science (M.Sc.)
Module coordinator	Prof. Dr. Markus Knauff Markus.Knauff@psychol.uni-giessen.de
Frequency and duration	Winter and summer (2 semester course, 1.5h per week)
Language of instruction	German (English on demand)
Examination	Written examination or presentation
ECTS	10 (for full 2 semester module; partial module = 5)
Prerequisites	none
Learning outcomes	Students will gain in-depth knowledge of cognition research. The module qualifies students for work in research and in organisations which put cognitive research findings to practical use. This includes organisations which provide counselling, diagnostics, and rehabilitation services for cognitive disorders as well as organisations and businesses which work with and develop cognition and neuroscience technology (e.g. human-machine interaction, human-machine interfaces, teaching and learning systems, language technology, virtual reality and prototyping, media and journalism, artificial intelligence, cognitive assistance systems).
Module content	Module content includes the functioning of the brain at the cognitive and neuronal levels, both in healthy people and in connection with psychological and neurological disorders. Topics of study include <ul style="list-style-type: none"> • biological and neuronal principles of mental efforts • methods for conducting experimental psychological and neuroscience research on mental efforts • methods from computer science (artificial intelligence, neuroinformatics, etc.) for research on mental efforts • application of cognitive research findings in areas of clinical use (cognitive disorders) and in the areas of cognition and neuroscience technologies