

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

Module name	Artificial intelligence
Module number	INF-25-Ba-KI
Responsible lecturer	Prof. Dr. Björn Andres bjoern.andres@tu-dresden.de
Qualification objectives	Students master basic methods and algorithms of artificial intelligence. They are competent in their specification, analysis, application and quantitative evaluation, based on concrete data.
contents	Contents of the module are basics of natural language processing and knowledge representation such as entity recognition and relation extraction, Bayesian closing and reasoning, basics and application of machine learning methods such as Hidden Markov models, decision trees, probabilistic closing, neural networks, kMeans, hierarchical clustering as well as methods for the evaluation of machine learning methods.
Forms of teaching and learning	The module includes lectures in the scope of 2 SWS, exercises in the scope of 2 SWS and self-study. The teaching language of the lectures and exercises is German.
Requirements for participation	In the diploma program Computer Science, in the bachelor program Computer Science and in the bachelor program Applied Computer Science, the competencies to be acquired in the module INF-25-Ba-AuD Algorithms and Data Structures are required.
usability	The module is a compulsory module in the Computer Science undergraduate degree programme. The module is a compulsory module in the Bachelor's programme in Computer Science and the Bachelor's programme in Applied Computer Science. The module creates the prerequisites for the modules, which it names under prerequisites for participation.
Conditions for awarding credits	The credit points are earned when the module examination has been passed. The module exam consists of a 90-minute exam. The language of the examination is German.
Credits and grades	5 credit points can be earned through the module. The module grade corresponds to the grade of the examination performance.
Frequency of the module	The module is offered every summer semester.
workload	The total workload is 150 hours.
Duration of the module	The module covers one semester.