

Data field	Explanation
Module number	WP07
German title / English title	Maschinelles Lernen / Machine Learning
Credits	5 ECTS
Workload	68 Contact hours (4 SWS Ü), 82 Hours of independent study
Subject coverage	Subject-specific specialization
Learning outcomes	Students have an overview of machine learning methods and can assess their usability for a certain application. They can implement simple machine learning solutions using freely available software tools.
Requirements	none
Level	1./2. Semester
Type of module	Seminar, Laboratory Training
Status	Required-Elective module
Semesters when offered	Every semester
Method of assessment / Type of examination	The method of assessment / type of examination must be defined by the lecturer within the deadline determined in §19 (2) RSPO. Should the deadline pass without determination of the form of assessment in the module, the following method of assessment / type of examination applies: 50% Written examination, 50% Written laboratory report of the laboratory group with consultation
Grade assessment	See study and examination regulations
Equivalent modules	Modules with similar content
Content	<ul style="list-style-type: none"> • Review of mathematical foundations • Overview of machine learning methods and applications • Linear regression • K-means clustering • Neural networks • Hidden Markov models • Freely available machine learning software tools
Reading list	Haykin: Neural Networks and Learning Machines, Prentice Hall International.
Further information	Language employed in the module: English
Required Room type	Ü-Sem, Ü-Lab