

Georg-August-Universität Göttingen		6 C
Module M.Inf.1256: Machine Learning		4 WLH
Learning outcome, core skills: Students <ul style="list-style-type: none"> • learn concepts and techniques of machine learning and pattern recognition, understand their advantages and disadvantages compared to alternative approaches • learn to solve practical data science problems using machine learning and pattern recognition • implement machine learning techniques like PAC learning, support vector machines and kernel methods • learn techniques for optimization and regularization of machine learning and pattern recognition techniques 		Workload: Attendance time: 56 h Self-study time: 124 h
Course: Machine Learning (Lecture) Bishop: Pattern Recognition and Machine Learning. https://bit.ly/2KDkueT		2 WLH
Examination: Written examination (90 minutes) Examination prerequisites: M.Inf.1256.Ex: At least 50% of homework exercises solved. Examination requirements: Knowledge of basic machine learning and pattern recognition techniques, their advantages and disadvantages and approaches to optimization and regularization. Ability to implement these techniques.		6 C
Course: Machine Learning - Exercise (Exercise)		2 WLH
Admission requirements: none	Recommended previous knowledge: Knowledge of basic linear algebra and probability; knowledge of basics of machine learning	
Language: English	Person responsible for module: Prof. Dr. Alexander Ecker	
Course frequency: each summer semester	Duration: 1 semester[s]	
Number of repeat examinations permitted: twice	Recommended semester:	
Maximum number of students: 100		