

Georg-August-Universität Göttingen		5 C 3 WLH
Module M.Inf.1151: Specialisation Softwareengineering: Data Science and Big Data Analytics		
Learning outcome, core skills: The students <ul style="list-style-type: none"> • can define the terms data science, data scientist and big data, and acquire knowledge about the principle of data science and big data analytics • become acquainted with the life cycle of data science projects and know how the life cycle can be applied in practice • gain knowledge about a statistical and machine learning modelling system • gain knowledge about basic statistical tests and how to apply them • gain knowledge about clustering algorithms and how to apply them • gain knowledge about association rules and how to apply them • gain knowledge about regression techniques and how to apply them • gain knowledge about classification techniques and how to apply them • gain knowledge about text analysis techniques and how to apply them • gain knowledge about big data analytics with MapReduce • gain knowledge about advanced in-database analytics 		Workload: Attendance time: 42 h Self-study time: 108 h
Course: M.Inf.1151.Lec Data Science and Big Data Analytics (Lecture, Exercise)		3 WLH
Examination: Klausur (90 Min.) oder mündliche Prüfung (ca. 20 Min.) M.Inf.1151.Mp: Data Science und Big Data Analytics Examination prerequisites: Successful completion of 50% of each exercise and the conduction of a small analysis project. Examination requirements: Data science, big data, analytics, data science life cycle, statistical tests, clustering, association rules, regression, classification, text analysis, in-database analytics.		5 C
Admission requirements: none	Recommended previous knowledge: Foundations of statistics and stochastic.	
Language: English	Person responsible for module: Prof. Dr. Jens Grabowski	
Course frequency: unregelmäßig	Duration: 1 semester[s]	
Number of repeat examinations permitted: twice	Recommended semester:	
Maximum number of students: 30		