Georg-August-Universität Göttingen **Module B.MES-SK.1108: Computer science and mathematics**	6 C 4 WLH

Learning outcome, core skills: Understanding of basic notions and methods of computer science and mathematics, including: representation of information, databases, the World Wide Web, foundations of programming, simulation, visualization; notations from logic and set theory, relations, graphs, functions, differentiation, extreme values, integration; vectors, linear transformations, matrices, eigenvalues; scale levels of variables, measures of location, dispersion and correlation, linear regression, probability, sampling, confidence intervals, fundamentals about statistical testing.	**Workload:** Attendance time: 56 h Self-study time: 124 h

Course: B.MES-SK.1108.C **Computer science and mathematics (Lecture, Exercise)**	4 WLH
Examination: Written exam (90 minutes) B.MES-SK.1108.Mp: Computer sciences and mathematics	6 C

Examination requirements: Understanding of basic notions and methods of computer science and mathematics, including: databases, WWW, foundations of programming, simulation, visualization; graphs, functions, differentiation, extreme values, integration; vectors, linear algebra; descriptive statistics, linear regression, probability, sampling, simple tests.	

Admission requirements: none	**Recommended previous knowledge:** none
Language: English	**Person responsible for module:** Prof. Dr. Winfried Kurth
Course frequency: each summer semester	**Duration:** 1 semester[s]
Number of repeat examinations permitted: cf. examination regulations	**Recommended semester:** 2
Maximum number of students: 25	