Georg-August-Universität Göttingen Module M.WIWI-QMW.0011: Advanced Statistical Programming with R		9 C 2 WLH
Learning outcome, core skills: The students acquire advanced understanding of programming concepts in the statistical programming environment R. They learn how to independently implement advanced statistical methodology and how to structure a large programming project. They furthermore develop abilities in debugging and optimizing R code and to present and document the results of their programming project.		Workload: Attendance time: 28 h Self-study time: 242 h
Course: M.WIWI-QMW.0011.Sem Advanced Statistical Programming with R (Seminar) <i>Contents</i> : The students work on advanced statistical programming projects using methods and techniques they got to know in the "Introduction to R". This involves implementation of advanced statistical methodology, utilising tools for debugging and profiling code and documenting the code. The progress of the projects is documented in a presentation and a written report.		2 WLH
Examination: Term paper (max. 20 pages) or project work (project documentation in group work (max. 10 pages)) or development of a prototype (prototypical programming development including documentation (max. 20 pages)) M.WIWI-QMW.0011.Mp: Advanced Statistical Programming with R Examination prerequisites: Two presentations (each ca. 20 minutes), regular attendance		9 C
Examination requirements: The students work on a programming project with the goal of implementing a given statistical approach in an R package. The programming project is worked on in groups of up to three students. The students document their work in terms of the documentation for their R package and a written report of approximately 15 pages.		
Admission requirements: none	Recommended previous knowledge: M.WIWI-QMW.0021 Introduction to Statistical Programming M.WIWI-QMW.0002 Advanced Statistical Inference (Likelihood & Bayes) M.MED.0001 Linear Models and their Mathematical Foundations	
Language:	Person responsible for module:	
Course frequency: once a year Number of repeat examinations permitted:	Duration: 1 semester[s] Recommended semester:	

twice	2
Maximum number of students:	
30	