Georg-August-Universität Göttingen **Module M.Inf.1155: Seminar: Advanced Topics in Software Engineering**	5 C 2 WLH

Learning outcome, core skills: The students • learn to become acquainted with an advanced topic in software engineering by studying up-to-date research papers. • gain knowledge about advanced topics in software engineering. The advanced topic may be related to areas such as software development processes, software quality assurance, and software evolution. • learn to present and discuss up-to-date research on advanced topics in software engineering. • learn to assess up-to-date research on advanced topics in software engineering.	**Workload:** Attendance time: 28 h Self-study time: 122 h

Course: M.Inf.1155.Sem **Seminar on Advanced Topics in Software-Engineering** (Seminar) *Contents*: Topics which will be covered by this seminar can include • Usability and Usability-Engineering • User-oriented Usability Testing • Expert-oriented Usability Evaluation • Web-analytics • Information Architecture • SOA – Service-oriented Architecture • UML-Tools and Code Generation • Details of Specific Process Models • Model-driven Architecture • Usage-based Testing • Defect Prediction • Design Patterns • Agent-based Simulation • Reliability-Engineering for Cloud Systems	2 WLH

Examination: Presentation (approx. 45 minutes) and written report (max. 20 pages) M.Inf.1155.Mp: Seminar: Ausgewählte Aspekte der Softwaretechnik **Examination prerequisites:** Attendance in 80% of the seminar presentations **Examination requirements:** The students shall show that • they are able to become acquainted with an advanced topic in software engineering by investigating up-to-date research publications. • they are able to present up-to-date research on an advanced topic in software engineering.	5 C

- they are able to assess up-to-date research on an advanced topic in software engineering.
- they are able to write a scientific report on an advanced topic in software engineering according to good scientific practice.

Presentation of an advanced topic in software engineering and written report.

Admission requirements:	Recommended previous knowledge:
none	Foundations of software engineering.
Language:	**Person responsible for module:**
English	Prof. Dr. Jens Grabowski
Course frequency:	**Duration:**
unregelmäßig	1 semester[s]
Number of repeat examinations permitted:	**Recommended semester:**
twice	
Maximum number of students:	
30	

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