Title of course	**Software Quality (Softwarequalität)**
Responsible instructor	*Prof. Dr. Erwin Neuhardt*
Learning objectives	*The students get to know different methods for describing and assuring software quality. They know tools and methods for examining software quality. They can apply these tools and methods to software projects. They can evaluate the efficacy of the methods in different application contexts.*
Course contents	*Definition of software quality, test methods for unit test, integration test, system test, static analysis, software metrics, tools and methods for examining software quality and measuring metrics*
Teaching methods	*Lecture (1 hour/week), tutorial (1 hour/week)*
Prerequisites	*Skills and knowledge in Java programming and software engineering (at least 10 ECTS)*
Suggested reading	*Binder, Robert V.: Testing object-oriented systems: models, patterns, and* tools, Addison-Wesley, 2000 *w/o author: SonarCube Documentation, online at docs.sonarqube.org* *Reichenbach, C.: Program Analysis Overview,* https://www.youtube.com/watch?v=ABqLrCf5BsA Reichenbach, C.: Foundations of Dataflow Analysis, https://www.youtube.com/watch?v=fWoc2bZZ59A Reichenbach, C.: Computation, https://www.youtube.com/watch?v=jnbMirDEByY
Applicability	*Master of Applied Computer Science, Master Angewandte Medieninformatik*
Workload	*Total 90 hours. Attendance: 30 hours, Self-Study: 40 hours, Exam Preparation 20 hours*
ECTS credit points and weighting factor	*4 CP (Emphasis of the grade for the final grade 4/120)*
Basis of student evaluation	*Written Examination*
Time	*2nd semester*
Frequency	*Once during the academic year*
Duration	*one semester*
Course type	*Compulsory optional course from the area software engineering*
Remarks	Teaching language is English.