

Course Code	TKIT163226									
Course Name	Software Quality									
Course Instructors	Lukito Edi Nugroho ; Warsun Najib									
Course Type	Selected Elective									
Course Classification	Engineering Topics									
Credit / Contact Hour per Week	3 / 150 minutes per Week									
Course Description	<p>As a product, software (software) has a distinctive feature that distinguishes it from other products. This causes the software to have certain criteria in defining its quality, and software development is also run with a different approach than the manufacture of other physical products. This course discusses the characteristics of software and its development related to the quality aspect, and from those two things the concept of quality, its implementation, its measurement, and its testing are discussed.</p> <p>Lectures are organized in the form of a combination of face-to-face and project activities (group assignments). Face-to-face lectures serve to provide the substance of the study, the student project becomes a means for students to apply the concepts he / she learns. Assessment is done on both of these components.</p>									
Prerequisites Courses	Software Architecture									
Covered Student Outcome	Development of Engineering Solution (b) Modern Tools Utilization (e) Knowledge of Contemporary Issues (f) Engineering Awareness and Society (j)									
Learning Outcome										
		Study Program Student Outcome								
No	Learning Outcome	SO (a) – SO (k)								
1.	Students are able to explain about the importance of quality aspect in software product and its impact to its use	Knowledge of Contemporary Issues								
2.	Students are able to explain the relevance between software requirements and software quality level	Engineering Awareness and Society								
3.	Students are able to explain the components of software quality assurance system	Knowledge of Contemporary Issues								
4.	Students are able to explain about software quality integration with software development cycle	Development of Engineering Solution								
5	Students able to conduct audit and evaluation of information system security based on ISO 2700x family	Engineering Awareness and Society								
6	Students are able to perform a simple analysis of the quality of a simple software product	Modern Tools Utilization								
Topic	1. Challenges in the development of quality software. 2. Software quality factors. 3. Pre-project components. 4. Infrastructure components. 5. Management of OT quality components. 6. Verification, validation, and qualification. 7. Student project									
Direct Assessment	<table border="1"> <thead> <tr> <th>Direct Assessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Project</td> <td>LO6, LO5</td> </tr> <tr> <td>Mid Exam</td> <td>LO1, LO2</td> </tr> <tr> <td>Final Exam</td> <td>LO3, LO4</td> </tr> </tbody> </table>		Direct Assessment Plan	Measured Learning Outcome	Project	LO6, LO5	Mid Exam	LO1, LO2	Final Exam	LO3, LO4
Direct Assessment Plan	Measured Learning Outcome									
Project	LO6, LO5									
Mid Exam	LO1, LO2									
Final Exam	LO3, LO4									
Indirect Assessment	Questionnaire (EDOM)									
References	[1] Galin, D. Software Quality Assurance: From Theory to Implementation. Addison-Wesley, 2004									