MODULE HANDBOOK
Master Program in Computer Science
Department of Computer Science and Electronics
Faculty of Mathematics and Natural Sciences
Universitas Gadjah Mada

Software Quality Assurance

<table>
<tr><td>Module name</td><td>Software Quality Assurance</td></tr>
<tr><td>Module level</td><td>Master</td></tr>
<tr><td>Code</td><td>MII-</td></tr>
<tr><td>Courses (if applicable)</td><td></td></tr>
<tr><td>Semester</td><td>Even (Genap)</td></tr>
<tr><td>Contact person</td><td>Dr. Khabib Mustofa,M.Kom.</td></tr>
<tr><td>Lecturer</td><td>Dr. Khabib Mustofa,M.Kom.</td></tr>
<tr><td>Language</td><td>Bahasa Indonesia</td></tr>
<tr><td>Relation to curriculum</td><td>Master program, elective, 2nd semester</td></tr>
<tr><td>Type of teaching, contact hours</td><td>Master program: lectures, 13 student, Tuesday, 13.00 - 15.30.</td></tr>
<tr><td>Workload</td><td>1. Lectures: 3 x 50 = 150 minutes (2.5 hours) per week.
2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week.
3. Private study: 3 x 60 = 180 minutes (3 hours) per week.</td></tr>
<tr><td>Credit points</td><td>3 credit points (sks).</td></tr>
<tr><td>Requirements according to the examination regulations</td><td>-</td></tr>
<tr><td>Recommended prerequisites</td><td>-</td></tr>
<tr><td>Learning outcomes and their corresponding PLOs</td><td>After completing this module, a student is expected to:
<table>
<tr><th>LO</th><th>Description</th><th>PLO</th></tr>
<tr><td>CO-1</td><td>Students understand and can explain well the concept of software quality and quality measures</td><td>PLO-03</td></tr>
<tr><td>CO-2</td><td>Students understand and can explain the components and processes that occur during each stage of software quality assurance</td><td>PLO-03, PLO-09</td></tr>
<tr><td>CO-3</td><td>Students are able to explain the types of software tests and their implementation</td><td>PLO-04</td></tr>
</table></td></tr>
</table>

<table>
<tr><td></td><td>
<table>
<tr><td>CO-4</td><td>Students are able to explain the role of development tools in software quality assurance</td><td>PLO-03, PLO-04, PLO-09</td></tr>
<tr><td>CO-5</td><td>Students are able to explain the role of professional parties (internal and external) in the software quality assurance process</td><td>PLO-04, PLO-09</td></tr>
</table>
</td></tr>
<tr><td>Content</td><td>This course provides discussion on the software quality assurance (SQA), starting from basic concept on sotware quality, SQA, stages in SQA, software testing: strategies and tools, tools in achieving software quality, and assuring software quality when involving outside parties.</td></tr>
<tr><td>Study and examination requirements and forms of examination</td><td>Mid-terms examination and Final examination.</td></tr>
<tr><td>Media employed</td><td>LCD, blackboard, websites, and e-learning.</td></tr>
<tr><td>Assessments and Evaluation</td><td>CO1: Problem 1 (8%) and Problem 2 (7%) in Midterm Exam
CO2: Problem 3 (8%) in Midterm Exam and Problem 2 (8%) in Final Exam, Student Presentation/Assignment (15%)
CO3: Problem 4 (7.5%) and Problem 5 (7.5%) in Midterm Exam , Assignment/Project (15%)
CO4: Problem 4 (8%) in Final Exam
CO5: Problem 3 (8%) and Problem 5 (8%) in Final Exam</td></tr>
<tr><td>Reading List</td><td>D. Galin and G. Daniel., 2004, Software Quality Assurance: From Theory To Implementation. Pearson Education.
Myers, G.J., Sandler, C. and Badgett, T., 2011. The art of software testing. John Wiley & Sons.
Kaner, C., Falk, J. and Nguyen, H.Q., 2000. Testing Computer Software Second Edition. Dreamtech Press.</td></tr>
</table>