

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

Software Design

Modulename	Perancangan Perangkat Lunak
Module level	Master
Code	MII-5301
Courses (if applicable)	Perancangan Perangkat Lunak (Software Design)
Semester	Odd (Ganjil)
Contact person	Dr. Tri Kuntoro Priyambodo
Lecturer	Dr. Tri Kuntoro Priyambodo, M.Sc. Drs. Agus Harjoko, M.Sc., Ph.D. Dra. Susi Daryanti, M.Sc.
Language	Bahasa Indonesia
Relation to curriculum	master program, compulsory, 1 st semester.
Type of teaching, contact hours	master program: lectures, < 17 student, Monday, 07:30 - 10:00 Wednesday, 13.00-15.30.
Workload	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.
Credit points	3 credit points (SKS).
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.
Recommended prerequisites	-
Learning outcomes and their corresponding PLOs	After completing this module, a student is expected to: CO-1 students are able to explain the types PLO3, PLO1 of software, software development model and software characteristics
	CO-2 students are able to explain and implement the management of software projects PLO1, PLO7

	<p>CO-3 students are able to explain and apply conventional software design methods of analysis, design and testing methods</p> <p>CO-4 students are able to explain and apply non-conventional software development methods</p> <p>CO-5 students are able to explain and do software design with object approach</p> <p>CO-6 students are able to explain and perform software design for client / server application, web or mobile with object approach.</p>	<p>PLO4, PLO5</p> <p>PLO4, PLO5</p> <p>PLO4, PLO5</p> <p>PLO 5, PLO8, PLO9</p>																																																			
Content	<p>Matakuliah Perancangan Perangkat Lunak akan membahas secara komprehensif dan lebih lanjut dari proses, aktivitas, dan metodologi perancangan dan rekayasa perangkat lunak. Sekumpulan metode diberikan untuk mewujudkan pendekatan rekayasa untuk pengembangan perangkat lunak Komputer. Seperti metodologi perangkat lunak konvensional diantaranya adalah model waterfall, spiral, prototipe, dan termasuk metode rekayasa perangkat lunak baru, seperti angile, pemrograman xstream, objek berorientasi, serta perancangan perangkat lunak berbasis client-server, web dan mobile. Kemudian akan mempelajari prinsip, metode, dan alat untuk implementasi, pengujian, penyampaian, perawatan, dan dokumentasi sistem perangkat lunak yang besar dan kompleks.</p>																																																				
Study and examination requirements and forms of examination	Ujian Tengah Semester dan Ujian Akhir Semester																																																				
Media employed	LCD, blackboard, and websites.																																																				
Assessments and Evaluation	<table border="1"> <thead> <tr> <th>CO</th> <th>Metode</th> <th>PLO yang Jenis didukung</th> <th></th> <th>Persentase</th> <th>Jumlah</th> </tr> </thead> <tbody> <tr> <td>CO-1</td> <td>Tugas 1</td> <td>PLO-6 Formatif</td> <td>5 %</td> <td>5 %</td> <td></td> </tr> <tr> <td>CO-2</td> <td>Tugas 2</td> <td>PLO-9</td> <td>Formatif</td> <td>10 %</td> <td>10 %</td> </tr> <tr> <td>CO-3</td> <td>Soal UTS</td> <td>PLO-6</td> <td>Sumatif 15%</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>PLO-7</td> <td>Sumatif 10 %</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>PLO-8</td> <td>Sumatif 10 %</td> <td>50 %</td> <td></td> </tr> <tr> <td>Tugas 4</td> <td>PLO-6</td> <td>Formatif</td> <td>7,5 %</td> <td></td> <td></td> </tr> <tr> <td></td> <td>PLO-8</td> <td>Formatif</td> <td>7,5 %</td> <td></td> <td></td> </tr> </tbody> </table>					CO	Metode	PLO yang Jenis didukung		Persentase	Jumlah	CO-1	Tugas 1	PLO-6 Formatif	5 %	5 %		CO-2	Tugas 2	PLO-9	Formatif	10 %	10 %	CO-3	Soal UTS	PLO-6	Sumatif 15%					PLO-7	Sumatif 10 %					PLO-8	Sumatif 10 %	50 %		Tugas 4	PLO-6	Formatif	7,5 %				PLO-8	Formatif	7,5 %		
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	CO-4	Soal UAS	PLO-1	Sumatif 5 %		
		PLO-8	Sumatif	10 %		
				30 %		
		PLO-9	Sumatif	5 %		
	Tugas 5	PLO-9	Formatif	15%		
Reading List	<p>[1] Pressman, R.S., 2008, <i>Software Engineering: A Practioner's Approach</i>, Edisi 5, McGraw-Hill</p> <p>[2] Somerville, I., 1995, <i>Software Engineering</i>, Addison Wesley, Edisi 4.</p> <p>[3] Whitten, J.L. and Bently, L.D., 2000, <i>Systems Analysis and Design Methods</i>, Edisi 4.</p> <p>[4] Situs buku pegangan kuliah <i>Software Engineering: A Practioner's Approach</i></p>					