

Information System and Implementation and Testing

Course Title: Information System and Implementation and Testing					
Course Code: CIT620 14	Student Workload: 8.50 Hours / Weeks	Credits: 3 Credits (4.50 ECTS)	Semester: 4 th Semester	Frequency: Even Semester	Duration: 16 Weeks/ Semester (Lecture: 14 weeks; Midterm assessment : 1 week; Final assessment : 1 week)
1	Types of Courses: Knowledge Specific Skills	Contact Hours: <i>Lecturing:</i> 2.50 Hours/ Week; <i>Practical Work:</i> 0.0	Independent Study: <i>Self-study:</i> 3.00 Hours/ Week; <i>Structured Assignment:</i> 3.00 Hours/ Week	Class Size: 40 Students	
2	Prerequisites for Participation (If Applicable): Information System Analysis and Design				
3	Learning Outcomes: 1. M1: Able to transform the model that has been compiled in the design phase into software code and algorithms 2. M2: Able to carry out testing on software using a White Box and Black Box testing approach 3. M3: Able to develop software testing documents.				
4	Subject aims/Content: At the end of the course, students are expected: 1. L1: Able to understand, explain and implement the coding phase in software development (M1) 2. L2: Able to transform software models both object-based and structured into codes and algorithms needed to meet software requirements (M1) 3. L3: Able to apply software testing techniques both white box and black box on software produced in the coding phase (M2) 4. L4: Able to develop and implement software testing documents (M3)				
5	Teaching Methods: Lecturing, Group Discussion, Case-Based Learning				
6	Assessment Methods: Essay, Multiple-Choice, Project Assessment, Anecdotal Record/Logbook				
7	This Course is Used in The Following Study Programme/s as Well: -				
8	Responsibility for Course : Fajar Pradana, Djoko Pramono				
9	Other Information: Bibliography: 1. Vliet, Hans van, Software Engineering: Principles and Practice 2. Homesauth, Bernard. Fundamentals of Software Testing 3. Myers, Glenford J. The art of Software Testing				

System Administration

Course Title: System Administration

Course Code: CSD60002	Student Workload: 8.5 Hours/ Weeks	Credits: 3 Credits (4.5 ECTS)	Semester: 4 th Semester	Frequency: Even Semester	Duration: 16 Weeks/ Semester (<i>Lecture: 14 weeks; Midterm assessment: 1 week; Final assessment: 1 week</i>)
1	Types of Courses: Specific skills	Contact Hours: <i>Lecturing:</i> 1.6 Hours/ Week; <i>Practical Work:</i> 0.9 Hours/ Week	Independent Study: <i>Self-study:</i> 3.00 Hours/ Week; <i>Structured Assignment:</i> 3.00 Hours/ Week	Class Size: 40 Students	
2	Prerequisites for Participation (If Applicable): Computer Network				
3	Learning Outcomes: <ol style="list-style-type: none"> 1. M1: Able to describe the role system administrator. 2. M2: Able to explain boot and shutdown mechanism. 3. M3: Able to explain user access management. 4. M4: Able to manage storage media. 5. M5: Able to explain system backup management. 6. M6: Able to explain the results of system performance measurement. 7. M7: Able to implement management software on the system. 8. M8: Able to explain data center management. 9. M9: Able to implement system administrator ethics. 				
4	Subject aims/Content: At the end of the course, students are expected: <ol style="list-style-type: none"> 1. L1: Able to define role system administrator. 2. L2: Able to explain the duties of a system administrator. 3. L3: Able to run basic Linux operating system commands. 4. L4: Able to run system updates and software additions in the Linux operating system. 5. L5: Able to use basic commands to observe system performance. 6. L6: Able to explain the boot mechanism of a computer system. 7. L7: Able to create and run boot scripts. 8. L8: Able to explain the mechanism of shutdown, halt and reboot. 9. L9: Able to explain the mechanism of access control on the system. 10. L10: Able to use basic commands to set up access control. 11. L11: Able to explain the active components in a process. 12. L12: Able to explain the cycle of a process. 13. L13: Able to explain the function of the signal in the process. 14. L14: Able to define process state. 15. L15: Able to identify the need for storage media in the system. 16. L16: Able to explain partition concept and implement partition design of system. 17. L17: Able to explain the working principle of logical volume management. 18. L18: Able to explain the concept of system backup. 19. L19: Able to plan system backup mechanism. 20. L20: Able to use system backup software. 21. L21: Able to explain system conditions by reading logs and syslog. 22. L22: Able to recognize factors that affect system performance. 23. L23: Able to perform basic analysis to find out system performance problems. 24. L24: Able to perform system performance checks. 25. L25: Able to explain how to work and use the operating system needed in the system. 26. L26: Able to do package management from operating system. 27. L27: Able to do revision control. 28. L28: Able to use configuration management tools. 29. L29: Able to define data center. 				

	<p>30. L30: Able to define data center requirements.</p> <p>31. L31: Able to design simple data center requirements.</p> <p>32. L32: Able to explain principles in system administrator ethics.</p> <p>33. L33: Able to apply principles in system administrator ethics in carrying out their operational duties.</p>
5	<p>Teaching Methods: Lecturing, Group Discussion, Case-Based Learning, Project-Based Learning</p>
6	<p>Assessment Methods: Essay, Multiple-Choice, Project Assessment, Anecdotal Record/Logbook, Product Assessment</p>
7	<p>This Course is Used in The Following Study Programme/s as Well: -</p>
8	<p>Responsibility for Course: 1. Dwija Wisnu Brata, S.ST., M.T..</p>
9	<p>Other Information: Bibliography: 1. Nemeth, Evi, Unix and Linux System Administration Handbook, 4th Edition, Pearson Education, 2011 2. Yahya, Widhy, Administrasi Sistem Server berbasis Linux, UB Press, 2018</p>