

System Integration Technology

Course Title: System Integration Technology					
Course Code: CIT620 17	Student Workload: 5.67 Hours / Weeks	Credits: 2 Credits (3.00 ECTS)	Semester: 4 th Semester	Frequency: Even Semester	Duration: 16 Weeks/ Semester (<i>Lecture:</i> 14 weeks; <i>Midterm assessment</i> : 1 week; <i>Final assessment</i> : 1 week)
1	Types of Courses: Specific Skills Course	Contact Hours: <i>Lecturing:</i> 1.67 Hours/ Week; <i>Practical Work:</i> 0.00 Hours/ Week	Independent Study: <i>Self-study:</i> 2.00 Hours/ Week; <i>Structured Assignment:</i> 2.00 Hours/ Week	Class Size: 40 Students	
2	Prerequisites for Participation (If Applicable): -				
3	Learning Outcomes: 1. M1: Understand the concept of service-based system development. 2. M2: Understand the basics of service-based technology. 3. M3: Understand system analysis and design with REST. 4. M4: Understanding service composition using REST. 5. M5: Understand security principles in SOA.				
4	Subject aims/Content: At the end of the course, students are expected: 1. L1: Understand the basics of service-based technology. 2. L2: Understanding SOA and REST technology. 3. L3: Understanding service-based data exchange. 4. L4: Understand communication protocols between systems with SOA. 5. L5: Understand the implementation of SOA technology with RESTful. 6. L6: Understand the basics of service-based system design methodology using REST. 7. L7: Able to perform SOA analysis and modeling using REST. 8. L8: Understand the basics of service composition using REST. 9. L9: Able to design service composition using REST. 10. L10: Understand security principles in system integration technology. 11. L11: Understand the principle of authentication in communication protocols between systems				
5	Teaching Methods: Lecturing, Group Discussion, Case-Based Learning				
6	Assessment Methods: Essay, multiple-choice, product assessment, anecdotal record/logbook				
7	This Course is Used in The Following Study Programme/s as Well: -				
8	Responsibility for Course: 1. Buce Trias Hanggara, S.Kom., M.Kom.				

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Other Information:

Bibliography:

1. Erl, T. Service-Oriented Architecture: Analysis and Design for Services and Microservices. Prentice Hall, 2016.
2. Erl, T., Carlyle, B., Pautasso, C., Balasubramanian, R. SOA with REST : Principles, Patterns & Constraints for Building Enterprise Solutions with REST. Prentice Hall, 2013.
3. Erl, T. Service-Oriented Architecture: Concepts, Technology, and Design. Prentice Hall, 2005.
4. Newman, S. Building Microservices. O'Reilly Media, Inc., 2015