

Course Code	TKIT163229													
Course Name	Application & Information Integration													
Course Instructors	Ridi Ferdiana; Rudi Hartanto													
Course Type	Selected Elective													
Course Classification	Engineering Topics													
Credit / Contact Hour per Week	3 / 150 minutes per Week													
Course Description	This course will discuss about integration architecture and method on information engineering domain.													
Prerequisites Courses	Interoperability (TKIT163105)													
Covered Student Outcome	Development of Engineering Solution (b) Modern Tools Utilization (e)													
Learning Outcome														
		Study Program Student Outcome												
No	Learning Outcome	SO (a) – SO (k)												
1.	Students are able to explain the need of integration starting from partial integration to full integration	Modern Tools Utilization (e)												
2.	Students able to apply integration architecture and technology based on complex problem	Modern Tools Utilization (e)												
3.	Students are able to develop blueprint of integration application & information	Development of Engineering Solution (e)												
4.	Students are able to evaluate integration solution	Development of Engineering Solution (e)												
Topic	<ol style="list-style-type: none"> 1. Review on integration and interoperability concept 2. Review of information system based on integration concept 3. The portfolio of Integration 4. Integration pillars 5. Integration & Application Architecture 6. Integration architecture standard overview (TOGAF, MODAF, Zachman) 7. Integration based on services 8. Contemporary Integration Overview 9. Cloud Computing and Integration 10. Integration on E-Business 11. Integration Assessment and Evaluation Method 12. Engineering Design - Student Project Kick Off 13. Engineering Design – Student Project Presentation 14. Engineering Design – Student Project Evaluation 													
Direct Assessment	<table border="1"> <thead> <tr> <th>Direct Assessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Assignment – Integration Case Study</td> <td>LO1, LO2</td> </tr> <tr> <td>Engineering Design Assignment – Integration blueprint project</td> <td>LO3</td> </tr> <tr> <td>Mid Exam</td> <td>LO1, LO2</td> </tr> <tr> <td>Final Exam</td> <td>LO3, LO4</td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Direct Assessment Plan	Measured Learning Outcome	Assignment – Integration Case Study	LO1, LO2	Engineering Design Assignment – Integration blueprint project	LO3	Mid Exam	LO1, LO2	Final Exam	LO3, LO4		
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Indirect Assessment	Questionnaire (EDOM)													
References	<ol style="list-style-type: none"> [1] Linthicum, D. 1999, Enterprise Application Integration, Addison-Wesley. [2] Lowy, J. 2015. The Zen of Software Architecture. O’Rielly Media [3] Mitra, T. 2015. Practical Software Architecture: Moving from System Context to Deployment. IBM Press. [4] Ruh, W. & Gold-Breinsten, B. 2004. Enterprise Integration: The Essential Guide to Integration Solutions. Addison-Wesley. [5] Waschke, M. 2015. How Clouds Hold IT Together: Integrating Architecture with Cloud Deployment. Apress. 													

	[6] f. Desfray, R & Raymond, G. 2014. Modeling Enterprise Architecture with TOGAF. Morgan Kaufmann
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