

## TIF21-32-44

### Application and Information Integration Integrasi Aplikasi dan Informasi

#### BASIC INFORMATION

Course Credit	2 / 100 minutes per Week
Course Type	Required
Course Classification	Engineering Topics
Prerequisites	-

#### STUDENT AND LEARNING OUTCOMES

##### Covered Student Outcomes

Development of Engineering Solution (b)                      Modern Tools Utilization (e)

##### Learning Outcomes

- LO1**    Students are able to explain the need of integration starting from partial integration to full integration
- LO2**    Students able to apply integration architecture and technology based on complex problem
- LO3**    Students are able to develop blueprint of integration application & information
- LO4**    Students are able to evaluate integration solution

#### COURSE DESCRIPTION

This course will discuss about integration architecture and method on information engineering domain.

#### TOPICS

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

## REFERENCES

- [1] Linthicum, D., *Enterprise Application Integration*, AddisonWesley., 1999.
- [2] Lowy, J., *The Zen of Software Architecture*, O’Rielly Media, 2015.
- [3] Mitra, T., *Practical Software Architecture: Moving from System Context to Deployment*, IBM Press, 2015.
- [4] Ruh, W. & Gold-Breinsten, B.,. *Enterprise Integration: The Essential Guide to Integration Solutions*, Addison-Wesley, 2004.
- [5] Waschke, M., *How Clouds Hold IT Together: Integrating Architecture with Cloud Deployment*, Apress, 2005.
- [6] F. Desfray, R & Raymond, G., *Modeling Enterprise Architecture with TOGAF*, Morgan Kaufmann, 2014.