

Course Code	TKIT163202											
Course Name	Security and Data Integrity											
Course Instructors	Warsun Najib; Sri Suning Kusumawadani											
Course Type	Required											
Course Classification	Engineering Topics											
Credit / Contact Hour per Week	3 / 150 minutes per Week											
Course Description	The Data Security and Data Integrity course is a continuation of the Information Systems and Computer Network Security course. This course starts on the basics of securing information systems in general as an introduction and focus in more specific security areas, data integrity in the database or on the file system											
Prerequisites Courses	Database Engineering (TKIT162105)											
<b>Covered Student Outcome</b>	<b>Development of Engineering Solution (b)</b> <b>Modern Tools Utilization (e)</b> <b>Knowledge of Contemporary Issues (f)</b> <b>Engineering Awareness and Society (j)</b>											
Learning Outcome												
		Study Program Student Outcome										
No	Learning Outcome	SO (a) – SO (k)										
1.	Student able to understand problem analysis related to security and data integrity	Knowledge of Contemporary Issues										
2.	Student able to utilize of software or applications related to data security	Modern Tools Utilization										
3.	Student able to understand and solve security of information systems issue in infrastructure or technological environment	Development of Engineering Solution										
4.	Student able to understand the theory and implementation of project management and understanding of the financial impact of security vulnerabilities.	Engineering Awareness and Society										
Topic	<ol style="list-style-type: none"> <li>Face-to-face in class</li> <li>Discussion between groups / individuals</li> <li>Homework assignments</li> </ol>											
Direct Assessment	<table border="1"> <thead> <tr> <th>Direct Assessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Mid-term exam</td> <td>LO1, LO2</td> </tr> <tr> <td>Final Exam</td> <td>LO3, LO4</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Direct Assessment Plan	Measured Learning Outcome	Mid-term exam	LO1, LO2	Final Exam	LO3, LO4				
Direct Assessment Plan	Measured Learning Outcome											
Mid-term exam	LO1, LO2											
Final Exam	LO3, LO4											
Indirect Assessment	Questionnaire (EDOM)											
References	<p>[1] The Complete Reference: Information Security, 2nd edition, Marks Rhodes-Ousley, McGraw-Hill Education, 2013.</p> <p>[2] Database Security, 1st edition, Alfred Basta, Cengage Learning, 2011</p> <p>[3] Database Security and Auditing: Protecting Data Integrity and Accessibility, 1st edition, Hassan A. Afyouni, Cengage Learning, 2013</p>											