



**MODULE HANDBOOK DESCRIPTION**

Module designation	<i>Information Systems Security</i>	
Code	<i>FBD4115</i>	
Semester(s) in which the module is taught	<i>7 / fourth year</i>	
Person responsible for the module	<i>A.S.Rachman, ST., MT.</i>	
Language	<i>Indonesian</i>	
Relation to curriculum	<i>Elective for Computer Engineering</i>	
Teaching methods	<i>lectures, small group discussion, project &amp; case base method.</i>	
Workload (incl. contact hours, self-study hours)	Contact minutes every week, each week of the 16 weeks/semester: <ul style="list-style-type: none"> <li>• Lectures: 3 x 50 minutes</li> <li>• Exercises and Assignments: 3 x 60 minutes</li> <li>• Self-study: 3 x 60 minutes.</li> </ul> Total study hours = 8 hours 30 minutes/week.	
Credit points	<i>2 SKS (~3.2 ECTS)</i>	
Required and recommended prerequisites for joining the module	-	
Module objectives/intended learning outcomes	<i>1. Students are able to organize the concepts of vulnerabilities, threats, risks, controls, architecture and information security standards;</i>	<i>PLO3 (H)</i>
	<i>2. Students are able to differentiate cryptographic concepts and technologies, access control and identity security;</i>	
	<i>3. Students are able to plan the security of data, application, network, and physical;</i> <i>4. Students are able to reconstruct incident response and computer forensic concepts;</i>	<i>PLO4 (M)</i>
	<i>5. Students are able to to evaluate security risk management, business continuity, security policies and programs.</i>	<i>PLO5 (L)</i>

Content	<ol style="list-style-type: none"> <li>1. Pendahuluan keamanan sistem informasi</li> <li>2. Vulnerabilities, threat, risk &amp; control</li> <li>3. Dasar kriptografi</li> <li>4. Kendali akses dan manajemen identitas</li> <li>5. Keamanan jaringan</li> <li>6. Keamanan host dan keamanan data</li> <li>7. Keamanan aplikasi berbasis web</li> <li>8. Manajemen keamanan informasi</li> </ol>
Examination forms	<ul style="list-style-type: none"> <li>- Case based</li> <li>- Project based</li> </ul>
Study and examination requirements	<p><i>The final grade in the module is composed of:</i></p> <ol style="list-style-type: none"> <li>a. Case I assessment: 20%</li> <li>b. Case II assessment: 20%</li> <li>c. Project based: 60%</li> </ol> <p><i>Students must have a final grade of 65% or higher to pass</i></p>
Reading list	<ol style="list-style-type: none"> <li>1. Andy Taylor, David Alexander, Amanda Finch, David Sutton, 2018, <i>Information Security Management Principles</i>, BCS, The Chartered Institute for IT;</li> <li>2. <i>Handbook for Computer Security Incident Response Teams</i> <a href="http://www.cert.org/archive/pdf/csirt-handbook.pdf">http://www.cert.org/archive/pdf/csirt-handbook.pdf</a></li> <li>3. E.Wheeler, 2011, “<i>Security Risk Management: Building an Information Security Risk Management Program from the Ground Up</i>”, Syngress</li> <li>4. Gurjar, L.R., 2009, <i>Cyber securities and Cyber Terrorism</i>, Vardhaman Mahaveer Open</li> <li>5. HM Government, <i>Cyber Essentials Scheme Requirements for basic technical protection from cyber attacks</i>, 2014 Online: <a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/317481/Cyber_Essentials_Requirements.pdf">https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/317481/Cyber_Essentials_Requirements.pdf</a></li> <li>6. <i>Handbook of Security, Cryptography and Digital Signature</i> by P. Ramchandaran &amp; S.M. Bhaskar (Viva Book Pvt. Ltd.)</li> <li>7. Sheward, mike, <i>Hands-on Incident Response and Digital Forensics</i>, Imprint: BCS, The Chartered Institute for IT, 2018</li> </ol>