

## MODULE HANDBOOK

Module name		Introduction to Reliability Model																			
Module level, if applicable		3 <sup>rd</sup> year																			
Code, if applicable		SST-704																			
Semester(s) in which the module is taught		7 <sup>th</sup> (seventh)																			
Person responsible for the module		Muhammad Muhajir, S.Si., M.Sc.																			
Lecturer		Muhammad Hasan Sidiq Kurniawan, S.Si., M.Sc.																			
Language		Bahasa Indonesia																			
Relation to curriculum		Elective course in the third year (7 <sup>th</sup> semester) Bachelor Degree																			
Types of teaching and learning	Class size	Attendance time (hours per week per semester)	Form of active participation	Workload (hours per semester)																	
Lecture	50-60	2.5	Discussion and presentation	Face to face teaching	35																
				Structured activities	48																
				Independent study	48																
				Exam	5																
Total workload		136 hours																			
Credit points		3 CUs / 5.1 ECTS																			
Requirements according to the examination regulations		Minimum attendance at lectures is 75%. Final score is evaluated based on quiz, assignment, mid-term exam, and final exam.																			
Recommended prerequisites		Introduction to Mathematical Statistics I (SST-302).																			
Related course		Introduction to Survival Analysis (SST-615)																			
Module objectives/intended learning outcomes		<p>After completing this course, the students have ability to:</p> <p>CO 1. applied the statistical distribution in reliability problems.</p> <p>CO 2. estimate the appropriate estimation for parameters in reliability process.</p> <p>CO 3. analyze and present the research result based on reliability Process</p>																			
Content		<p>Introduction to reliability Case</p> <p>Statistical distributions for reliability Case and its application.</p> <p>Reliability Model</p> <p>Case Study</p>																			
Study and examination requirements and forms of examination		<p>The final mark will be weighted as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">No</th> <th style="width: 30%;">Assessment components</th> <th style="width: 30%;">Assessment types</th> <th style="width: 35%;">Weight (percentage)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CO 1</td> <td>Quiz, Assignment</td> <td>30%</td> </tr> <tr> <td>2</td> <td>CO 2</td> <td>Midterm Exam</td> <td>30%</td> </tr> <tr> <td>3</td> <td>CO 3</td> <td>Final Exam</td> <td>40%</td> </tr> </tbody> </table>				No	Assessment components	Assessment types	Weight (percentage)	1	CO 1	Quiz, Assignment	30%	2	CO 2	Midterm Exam	30%	3	CO 3	Final Exam	40%
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1	CO 1	Quiz, Assignment	30%																		
2	CO 2	Midterm Exam	30%																		
3	CO 3	Final Exam	40%																		
Media employed		Google Classroom, relevant websites, slides (power points), video, interactive media, white-board, laptop, LCD projector																			
Reading list		<ol style="list-style-type: none"> <li>1. Rausand, M. and Hoyland, A. System Reliability Theory. John Wiley &amp; Sons, Inc.</li> <li>2. Lee, E. T. and Wang, J. W. Statistical Methods for Survival Data Analysis. John Wiley &amp; Sons, Inc.</li> </ol>																			

