



# MODULE HANDBOOK

## Decision Support Systems

**BACHELOR DEGREE PROGRAM**  
**DEPARTMENT OF MATHEMATICS**  
**FACULTY OF SCIENCE AND DATA ANALYTICS**  
**INSTITUT TEKNOLOGI SEPULUH NOPEMBER**

# MODULE HANDBOOK

## Decision Support Systems

Module name	<b>Decision Support Systems</b>	
Module level	Undergraduate	
Code	KM184833	
Course (if applicable)	<b>Decision Support Systems</b>	
Semester	Spring (Genap)	
Person responsible for the module	Alvida Mustika Rukmi, S.Si., M.Si.	
Lecturer	Alvida Mustika Rukmi, S.Si., M.Si.	
Language	Indonesia and English	
Relation to curriculum	Undergraduate degree program, <b>elective</b> , 8 <sup>th</sup> semester.	
Type of teaching, contact hours	Lectures, <60 students	
Workload	<ol style="list-style-type: none"> <li>1. Lectures : 2 x 50 = 100 minutes per week.</li> <li>2. Exercises and Assignments : 2 x 60 = 120 minutes (2 hours) per week.</li> <li>3. Private learning : 2 x 60 = 120 minutes (2 hours) per week.</li> </ol>	
Credit points	2 credit points (sks)	
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.	
Mandatory prerequisites	Object Oriented Programming	
Learning outcomes and their corresponding PLOs	<p>Course Learning Outcome (CLO) after completing this module,</p> <ol style="list-style-type: none"> <li>1. The students are able to explain the decision-making frameworks in management.</li> <li>2. The students are able to explain the basic concepts of decision making</li> <li>3. The students are able to understand the characters and capabilities of decision support systems</li> <li>4. The students are able to understand the models and analysis in decision support systems</li> <li>5. The students are able to recognize and understand issues in business intelligence</li> <li>6. The students are able to explain the Company's information systems and where the decision support system is applied</li> </ol>	

	<p>7. The students are able to explain about knowledge managements</p> <p>8. The students are able to understand the effects of electronic commerce on decision making</p> <p>9. The students are able to understand the impacts or influences of the management support system</p>	
Content	<p>Management support systems, decision making, systems and support, decision support systems, data management, data modeling and management, user interfaces, building decision support systems, organizations of decision support systems, group decision support systems, executives and their support systems, knowledge and data machines, applications and models of decision support systems.</p>	
Study and examination requirements and forms of examination	<ul style="list-style-type: none"> <li>• In-class exercises</li> <li>• Assignment 1, 2</li> <li>• Mid-term examination</li> <li>• Final examination</li> </ul>	
Media employed	<p>LCD, whiteboard, websites (myITS Classroom), zoom.</p>	
Reading lists	<p>Main:</p> <ol style="list-style-type: none"> <li>1. Turban, Efraim &amp; Aronson, Jay E., "Decision Support Systems and IntelligentSystems", 8th edition, Prentice Hall, Upper Saddle River, NJ, 2007</li> </ol> <p>Supporting reference:</p> <ol style="list-style-type: none"> <li>1. Marakas, George M. "Decision Support Systems in the 21st Century", 2nd Edition, Prentice Hall, 2003</li> <li>2. Vicki L. Sauter, Decision Support for Business Intelligence, John Wiley &amp; Sons, 2010</li> <li>3. Prague, Ralph, H &amp; Hugh, J. Watson, "Decision Support Systems", Prentice Hall, Inc., 1993</li> </ol>	

