

# HANDBOOK

**BACHELOR OF INFORMATICS PROGRAM  
DEPARTMENT OF INFORMATICS  
FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY  
INSTITUT TEKNOLOGI SEPULUH NOPEMBER**

Module name	<b>Wireless Network</b>	
Module level	Undergraduate	
Code	IF184911	
Courses (if applicable)	<b>Wireless Network</b>	
Semester	7	
Contact person		
Lecturer		
Language	Bahasa Indonesia dan English	
Relation to curriculum	<ol style="list-style-type: none"> <li>1. Undergraduate degree program; optional; 7<sup>th</sup> semester.</li> <li>2. International undergraduate program; optional; 7<sup>th</sup> semester.</li> </ol>	
Type of teaching, contact hours	<ol style="list-style-type: none"> <li>1. Undergraduate degree program: lectures, &lt; 60 students,</li> <li>2. International undergraduate program: lectures, &lt; 40 students</li> </ol>	
Workload	<ol style="list-style-type: none"> <li>1. Lectures: 3 sks x 50 = 150 minutes (2 hours 30 minutes) per week.</li> <li>2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week.</li> <li>3. Private study: 3 x 60 = 180 minutes (3 hours) per week.</li> </ol>	
Credit points	3 credit points (sks).	
Requirements according to the examination	A student must have attended at least 80% of the lectures to sit in the exams.	
regulations		
Mandatory prerequisites	Computer Networks	
	After completing this module, a student is expected to:	

Learning outcomes and their corresponding PLOs	<b>CO1</b> The students are able to apply concepts to various wireless network architectures to improve performance and provide solutions to wireless network problems.	
Content	<p>Knowledge:</p> <ul style="list-style-type: none"> <li>• Mastering the concepts and principles of architecture, systems and the basics of computer networks based on logic systems</li> <li>• Master the theoretical concepts and principles of network-based computing and the latest technologies related to it, in the fields of distributed computing and mobile computing, multimedia computing, high-performance computing and information and network security</li> </ul> <p>Specific Skill:</p> <ul style="list-style-type: none"> <li>• Able to apply computer architecture, operating system working principles to design, implement and manage network systems that have high performance, are safe, and efficient</li> <li>• Able to apply the concept of network-based computing, parallel computing, distributed computing to analyze and design computational problem solving algorithms in various fields</li> </ul>	
Study and examination requirements and forms of examination	Mid-terms examination and Final examination.	
Media employed	LCD, whiteboard, websites, books (as references), etc.	
Assessments and Evaluation		

Reading List	<ol style="list-style-type: none"><li>1. Coleman, D., Westcott, D., "CWNA: Certified Wireless Network Administrator Official Study Guide", Wiley Publishing Inc., 2009.</li><li>2. Schiller, J.H., "Mobile Communications 2nd Edition", Addison-Wesley, 2004.</li><li>3. Stallings, W., "Wireless Communications and Networking 2<sup>nd</sup> Edition", Prentice Hall, 2004.</li><li>4. James F. Kurose and Keith W. Ross, Komputer Networking: A Top-Down Approach, 7th Edition, Addison Wesley, 2013.</li></ol>
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