

# HANDBOOK

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

Module name	<b>Multimedia Network</b>	
Module level	Undergraduate	
Code	IF184941	
Courses (if applicable)	<b>Multimedia Network</b>	
Semester	8	
Contact person		
Lecturer	Henning Titi Ciptaningtyas, S.Kom, M.Kom	
Language	Bahasa Indonesia dan English	
Relation to curriculum	<ol style="list-style-type: none"> <li>1. Undergraduate degree program; optional; 8<sup>th</sup> semester.</li> <li>2. International undergraduate program; optional; 8<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 Network	
	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 & procedures in sending multimedia data (text, images, sound, and video) in the network optimally and safely both individually and in groups in teamwork.	
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>• Mastering 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> <li>• Mastering the concepts and principles of capture, processing and information storage in various forms</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> <li>• Able to collect, digitize, and process data into new useful information using effective and efficient data storage and modeling</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	<ul style="list-style-type: none"><li>• Henning Titi Ciptaningtyas, "Bahan Ajar Jaringan Multimedia", <a href="http://share.its.ac.id">http://share.its.ac.id</a>, 2013, IF-ITS.</li><li>• Jeniq-Neng Hwang, "Multimedia Networking From Theory to Practice", Cambridge, 2013. ISBN 9780521882040.</li><li>• Ze-Nian Li and Mark. S. Drew, "Fundamentals of Multimedia", Prentice-Hall, 2003. ISBN 0130618721.</li><li>• W.C. Hardy, "QoS Measurement and Evaluation of Telecommunications Quality of Service", Wiley, 2001. ISBN 0470845910.</li></ul>