



MODULE HANDBOOK DESCRIPTION

Module designation	Telecommunication Network	
Code	FBC3103	
Semester(s) in which the module is taught	5 / third year	
Person responsible for the module	Abdullah Zainuddin, ST., MT.	
Language	Indonesian	
Relation to curriculum	Compulsory for Telecommunication System	
Teaching methods	Lectures, small group discussion, case base method.	
Workload (incl. contact hours, self-study hours)	<p>Contact minutes every week, each week of the 16 weeks/semester:</p> <ul style="list-style-type: none"> • Lectures: 3 x 50 minutes • Exercises and Assignments: 3 x 60 minutes • Private study: 3 x 60 minutes. <p>total study hours = 8 hours 30 minutes/week</p>	
Credit points	3 SKS (~ 4.8 ECTS)	
Required and recommended prerequisites for joining the module	<ul style="list-style-type: none"> - Basic Telecommunication (FBS1217) - Telecommunication System (FBC3102) 	
Module objectives/intended learning outcomes	1. Students are able to select and apply actual modelling, calculating, and testing methods to Quantitatively analyse the performance of communication networks	PLO3
	2. Students are able to design simple communication networks to achieve performance objectives	PLO4
	3. Students are able to apply theoretical concepts to solve problems in telecommunication networks	PLO5
Content	<ol style="list-style-type: none"> 1. Introductory concepts (including connection-oriented/connectionless services, layered architecture and OSI model, transfer modes, network topology) 2. Core concepts (including transmission, data link functions, bridging, switching, addressing, signalling, and routing) 3. Advanced concepts (including traffic management, network management, and security management) 	

Examination forms	<ul style="list-style-type: none"> - Assignment - Written case study - Midterm and final test
Study and examination requirements	<p>The final grade in the module is composed of:</p> <ul style="list-style-type: none"> a. Assignment :10% b. Case I assessment: 15% c. Case II assessment: 15% d. Midterm assessment: 30% e. Final assessment: 30% <p>Students must have a final grade of 65% or higher to pass</p>
Reading list	<ol style="list-style-type: none"> 1. Communication Networks: Principles and Practice, Sumita Kasera, Nishit Narang, Sumita Narang, McGraw Hill Education (India) Private Limited, 2005. 2. Computer Networking: A Top Down Approach Featuring the Internet, 6th edition. Jim Kurose, Keith Ross, Addison-Wesley, 2012 3. Computer Networks, 5th edition. Andrew S. Tanenbaum , David J. Wetherall, Prentice Hall, 2010 4. Data Networks: 2nd edition. Dimitri Bertsekas, Robert Gallager, Prentice-Hall, 1992