

MODULE HANDBOOK

Module Name	Mathematics for Computer Science		
Module level, if applicable	Undergraduate		
Code, if applicable	02143142004		
Subtitle, if applicable	-		
Courses, if applicable	-		
Semester(s) in which the module is taught	1		
Person responsible for the module	Dwi Maryono, S.Si., M.Kom (dwimarus@yahoo.com)		
Lecturer	Dwi Maryono, S.Si., M.Kom		
Language	Indonesian and English		
Relation to curriculum	Undergraduate degree program, compulsory course in 1st semester		
Type of teaching, contact hours	Undergraduate degree program, < 40 students		
Workload	Lectures: 2 x 50 = 100 minutes (1 hours 40 minutes) per week Exercise and Assignments: 2 x 60 = 120 minutes (2 hours) per week Private study: 2 x 60 = 120 minutes (2 hours) per week		
Credit points	2 SKS		
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams		
Recommended Prerequisites	-		
Module objectives/intended learning outcomes	After completing this module, a student is expected to:		
	No	Course Learning Outcome	PLO
	1	Through problem-based learning, students can apply the basics of logic and draw conclusions and problems in the computer field.	PLO-4
	2	Through problem-based learning, students can apply combinatorial principles in real life	PLO-4
	3	Through problem-based learning students can apply the principles of set theory in real life	PLO-4
Content	This course contains applied mathematics material, namely discrete mathematics related to computer science such as logic, combinatorics, set theory and recursive relations.		

Study and examination requirements and forms of Examination	Forms of examination:		
	No	Course Learning Outcome	Examination
	1	Through problem-based learning, students can apply the basics of logic and draw conclusions and problems in the computer field.	Students Activity (10%) Presentation (10%) Cognitive Test (10%)
	2	Through problem-based learning, students can apply combinatorial principles in real life	Students Activity (10%) Presentation (10%) Cognitive Test (15%)
	3	Through problem-based learning students can apply the principles of set theory in real life	Students Activity (10%) Presentation (10%) Cognitive Test (15%)
Media employed	LCD, Whiteboard, PowerPoint Slide Presentation, Practical Guidance Video, websites, etc.		
Reading list	1. Grimaldi, R.P. Discrete and Combinatorial Mathematics 5th Ed. Pearson Education Inc. 2004 2. Rosen. K.H. Discret Mathematics and Its Application. The McGraw Hills Company. 1998		