



UNIVERSITAS MATARAM
(University of Mataram)
FAKULTAS TEKNIK
(Faculty of Engineering)
PROGRAM STUDI TEKNIK INFORMATIKA
(Department of Informatics Engineering)

MODULE HANDBOOK DESCRIPTION

Informatics Logic (W22K11)

Module designation	<i>Informatics Logic</i>
Semester(s) in which the module is taught	<i>1 / first year</i>
Person responsible for the module	<i>Ariyan Zubaidi, S.Kom., M.T.</i>
Language	<i>Indonesian</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>Lectures, Discussions, Case Study</i>
Workload (incl. contact hours, self-study hours)	Contact Hours every week, each week of the 16 weeks/semester including Evaluation • 3 x 50 minutes lecturer/week • 150 minutes class exercise/week • Self Study hours = 180 minutes/week • Midterm Exam = 90 Minutes • Final Exam = 90 Minutes Total workload 115 hours/Semester
Credit points	3 (~ 4,6 ECTS)
Required and recommended prerequisites for joining the module	-

Module objectives/ intended learning outcomes	In this course, students are expected to be able to: 1. able to understand the mathematical logic such as propositional and predicate logic 2. able to analyze the argument using various techniques in terms of propositional logic
Content	This course covers topics such as propositional logic, syntax and semantics of propositional logic, logical connectives, Truth tables, Tautologies and Contradictions, Valid propositions. The other major to be discussed is predicate logic. In this topic, subtopics such as the need for predicate logic, Quantifiers: Universal and Existential quantifiers;
Examination forms	<i>Assignments, Contribution/Activeness in Class, Quizzes, Scheduled Exam</i>
Study and examination requirements	<i>Assignments 30%, Quizzes 20 % Contribution/Activeness in Class 3%, Presence in Class 2 % Scheduled Exam 45%,</i>
Reading list	1. Mordechai Ben-Ari. Mathematical Logic For Computer Science, 3rd Edition, 2012. Springer. 2. F. Soesianto. Logika Matematika untuk Ilmu Komputer, 2003. Andi Offset.