



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

MODULE HANDBOOK DESCRIPTION

FUZZY LOGIC (K22P61)

Module designation	<i>Fuzzy Logic</i>
Semester(s) in which the module is taught	<i>6 / third year</i>
Person responsible for the module	<i>Gibran Satya Nugraha, S.Kom., M.Eng</i>
Language	<i>Indonesian</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>Lectures, Discussions, Project</i>
Workload (incl. contact hours, self-study hours)	Contact Hours every week, each week of the 16 weeks/semester including Evaluation <ul style="list-style-type: none"> ● 2 x 50 minutes lecturer/week ● 2 x 60 minutes class exercise/week ● Self Study hours = 120 minutes/week Total workload 340 minutes/week
Credit points	<i>2 (~ 3,2 ECTS)</i>
Required and recommended prerequisites for joining the module	Artificial Intelligence, Probabilistic and Statistic

<p>Module objectives/intended learning outcomes</p>	<p>The main objective of Fuzzy Logic courses This course provides experience for students to be able to solve a problem using fuzzy inference system</p> <p>Based on these main objectives, the Fuzzy Logic courses have subject learning outcomes, namely:</p> <ol style="list-style-type: none"> 1. Able to understand the basic concepts of several fuzzy inference system methods 2. Able to apply several fuzzy inference system methods for solving simple cases manually and with computer assistance (independently) 3. Able to create proposed research about implementing several fuzzy inference system methods for some case
<p>Content</p>	<p>Fuzzy Logic is a course that studies how fuzzy inference systems can solve crisp and fuzzy problems. This course also discusses the implementation of fuzzy on other machine learning methods such as KNN and Clustering. In this course, we also learn about fuzzy databases using the Umano and Tahani method</p>
<p>Examination forms</p>	<p><i>Assignments, Quiz, Assessment, Project (Oral Presentation)</i></p>
<p>Study and examination requirements</p>	<p><i>Assignments 20%, Quiz 25%, Project 55%</i></p>
<p>Reading list</p>	<ol style="list-style-type: none"> 1. Fuzzy Sets, Fuzzy Logic, and Fuzzy Systems By (author): Lotfi A Zadeh 2. Fuzzy Logic with Engineering Applications Timothy J. Ross (Author) 3. Fuzzy Sets and Fuzzy Logic: Theory and Applications by Bo Klir, George J.;Yuan (Author)